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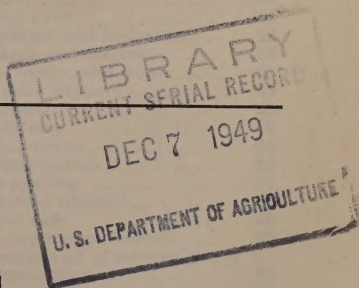
**REPORT OF THE ADMINISTRATOR**

**OF THE**

**PRODUCTION AND MARKETING**

**ADMINISTRATION**

**1948**



**UNITED STATES DEPARTMENT OF AGRICULTURE**

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# CONTENTS

	Page		Page
Introduction.....	1	Fats and oils.....	47
Organization of PMA.....	4	Price-support programs.....	47
Agricultural conservation program.....	8	Purchases in foreign countries.....	49
Price-support operations.....	20	Agricultural-supply programs.....	50
Foreign supply programs.....	20	War Food Order 63.....	50
Procurement.....	20	Fruits and vegetables.....	51
Staff assistance.....	20	Price support and surplus removal.....	51
Section 32 activities.....	21	Regulation.....	52
Food-distribution programs.....	22	Market news.....	55
School lunch.....	22	Standardization and inspection.....	55
Direct distribution.....	22	Grain, pulses, feeds, and seeds.....	57
Food preservation.....	23	Price support.....	57
Marketing abundant foods.....	23	Procurement, sales, and exports.....	58
Nutrition programs.....	24	Market news.....	61
National garden program.....	24	Regulation and inspection.....	62
Fat salvage.....	25	Research and testing.....	63
Cross-commodity marketing research.....	25	Livestock, meats, and wool.....	65
Prepackaging of perishable food products.....	25	Hog price support.....	65
Reducing loss and damage in transportation.....	26	Procurement.....	65
Market news.....	27	Regulations.....	66
Grades and standards.....	28	Market news.....	66
Market service activities.....	29	Standardization.....	67
Marketing facilities.....	30	Meat grading.....	67
New or improved market facilities.....	30	Marketing research.....	67
Warehousing facilities.....	31	Poultry and eggs.....	68
Warehouse supervision.....	31	Price-support purchases.....	68
Handling-equipment studies.....	32	Disposition of price-support commodities.....	69
Transportation facilities.....	32	Repackaging operations.....	69
Transportation-rate adjustments.....	32	Standardization and grading.....	70
Shipping and storage.....	33	Research.....	71
Compliance and investigation.....	34	Transportation activities.....	71
Audit activities.....	35	Publications.....	71
Labor.....	35	Market news.....	72
Cotton.....	37	Sugar.....	72
Prices.....	37	Subsidy operations.....	72
Loan, purchase, and export programs.....	37	Price support.....	73
Standardization.....	39	Refiner program.....	74
Market reports.....	40	Completed programs.....	74
New-use programs.....	40	Sugar Act activities.....	74
Price-quotation supervision.....	41	Tobacco.....	79
Testing.....	41	Loans, price support, and exports.....	79
Research.....	41	Marketing quotas.....	80
Dairy products.....	42	Economic analysis and statistical work.....	80
Marketing agreements and orders.....	42	Inspection, market news, demonstrations, and training.....	81
School lunch activities.....	44	Standardization and research.....	81
Dairy price-support programs.....	44	Naval stores.....	82
Agricultural-supply programs.....	45	Price support.....	82
Foreign-assistance analysis.....	45	Naval Stores Act.....	82
Market news service.....	45	Research and standardization.....	83
Inspection and grading.....	46		
Standardization.....	46		







# REPORT OF THE ADMINISTRATOR OF THE PRODUCTION AND MARKETING ADMINISTRATION, 1948

UNITED STATES DEPARTMENT OF AGRICULTURE,  
PRODUCTION AND MARKETING ADMINISTRATION,  
Washington, D. C., October 20, 1948.

HON. CHARLES F. BRANNAN,  
*Secretary of Agriculture.*

DEAR MR. SECRETARY: I present herewith the report of the Production and Marketing Administration for the fiscal year ended June 30, 1948.

Sincerely yours,

RALPH S. TRIGG, *Administrator.*

## INTRODUCTION

Programs of the Production and Marketing Administration during the fiscal year 1948 had two fundamental objectives. The first was to assist in maintaining agricultural output at the high level required to meet urgent domestic and foreign demands for food and fiber. The second was to aid in moving these above-average supplies into consumption with increased efficiency.

PMA again cooperated in the establishment of production goals. How successful farmers were in meeting these goals calling for heavy production is revealed by the fact that—despite below-average crops of corn, cotton, barley, and rye—total agricultural output during the year was about equal to that of each of the previous 3 years, a third more than the prewar 1935–39 average.

Price-support programs, financed and controlled by the Commodity Credit Corporation but administered by PMA, played a major role in bringing about the abundant production of the year. The price-support programs, by establishing price minimums or “floors” for many important commodities, assured farmers that they could produce required supplies without paving the way for a disastrous decline in prices. The intense demand for agricultural commodities held prices received by farmers at a level that averaged 118 percent of parity during the 12-month period; but prices undoubtedly would have risen even higher had price-support programs not encouraged farmers to meet requirements. Actual price-support operations, on a substantial scale, were necessary for only a relatively few commodities—peanuts, tobacco, potatoes, eggs, sugar, dried fruits, and wool.

PMA's program to conserve the Nation's soil resources (the agricultural conservation program) also contributed much to the splendid production record achieved during the year. Conservation practices varied in accordance with the need, and included spreading lime and fertilizer; constructing terraces, dams, flumes, siphons, and weirs;

seeding grasses and legumes; establishing pastures; planting shelter-belts and windbreaks; and plowing on the contour. About 3,000,000 farmers cooperated in this comprehensive program during the year.

Farmer-elected county and community committeemen again demonstrated the effectiveness of the committee system in the local administration of goal, price-support, agricultural-conservation, and other national agricultural programs.

Most of the commodities produced on American farms during the year moved readily into consumption. That was particularly true of food products.

Though prices of food in retail stores were high, the purchasing power of consumers also was high. As a result, the per capita consumption of food, although it declined slightly from that in the fiscal year 1947, was about 14 percent greater than the prewar 1935-39 average.

Several PMA programs were carried on to stimulate the distribution of food through normal marketing channels, with major emphasis on foods in abundant supply. For example, a national program was conducted throughout the year to call attention to and encourage the purchase of potatoes and a few other foods in temporary or seasonal surplus. Food-preservation programs provided additional outlets during periods of peak supply. Nutrition programs—carried on through Federal, State, and local nutrition committees—provided guidance as to quantitative and qualitative food requirements.

Substantial quantities of foods in abundant supply were acquired under section 32, which, among other things, seeks to increase the domestic consumption of agricultural commodities. A large percentage of these foods was used in the national school-lunch program, which reached about 6,000,000 children of school age, supplementing foods regularly supplied under Federal-State operations. The foods acquired under section 32 also were used by schools other than those participating in the national school-lunch program, by institutions, and by persons on relief rolls. This distribution of foods acquired under section 32, in addition to providing many farmers a much-needed market, also improved nutrition and reduced waste.

American food continued to aid in the reconstruction and rehabilitation of western Europe and certain areas in the Far East. Food exports from the United States during the fiscal year totaled 19,347,000 long tons, as compared with 18,870,000 long tons the preceding year. Of the 19,347,000 long-ton total, 15,250,000 long tons were grain and grain products in terms of grain equivalent; rice, 407,000; edible fats and oils, 251,000; meat, 68,000; dairy products, 460,000; and other foods, 2,911,000 long tons.

The Commodity Credit Corporation, using PMA personnel and facilities, procured about 60 percent of the total food exported during the year. The CCC, in turn, was reimbursed for its purchases by foreign governments and by other United States Government agencies, including the Department of the Army, the Department of State, and the European Cooperation Administration.

A shortage of boxcars threatened to hamper the movement of food for export, particularly the movement of bulk grain. This problem was largely solved by using inland waterways and by exporting substantial quantities of grain from ports on the Gulf of Mexico, which were relatively closer to the source of grain supply than ports on the Atlantic and Pacific coasts.



Rapid headway was made in the over-all program to bring about more efficiency in the domestic marketing of farm commodities.

Under the Research and Marketing Act of 1946, PMA had in operation at the end of the fiscal year more than 75 projects, directed largely at improving the marketing and utilization of farm products. Although many of the research projects will require two or more years for completion, progress reports already are providing information of practical value at various stages of the marketing process. Lines of research include finding industrial uses for inferior or damaged grains; the improvement of marketing facilities; reducing the deterioration and loss of eggs in marketing channels; improving the merchandising practices of fresh fruit and vegetable retailers to reduce spoilage and provide higher quality products for consumers; determining the best types of shipping containers; and developing improved standards for farm products. Including the subprojects, the activities under the act comprise attacks on hundreds of specific problems in the distribution and utilization of farm commodities.

PMA intensified its work to develop plans for and to promote the construction of modern facilities for the assembly and distribution of farm products. PMA worked on the planning and promoting of adequate market facilities in 28 cities and production areas. In eight cities, land was bought or an organization was set up to make building plans; and in two, facilities were built and placed in operation.

PMA transportation-rate specialists continued their efforts to obtain equitable freight rates for farm products. To achieve this end, informal negotiations were carried on with carriers, as well as formal proceedings before transportation regulatory agencies.

More interest in marketing-agreement and order programs was shown than during other recent years. Twenty programs were in effect for thirteen different fruits, vegetables, and edible tree nuts marketed from sixteen States. Federal orders covering the marketing of fluid milk totaled 30.

Marketing control of sugar under the quota system was resumed in January 1948. Wholesale prices of refined cane sugar for the first 6 months of 1948 averaged 7.78 cents per pound as compared with an average price of 8.20 cents per pound during the comparable period in 1947, when sugar was under price ceilings—evidence that the quota system was protecting interests of domestic consumers as well as producers. Determinations resulting in increased wage rates for workers in domestic sugarcane- and sugar-beet-producing areas were issued during the year.

The market news service was expanded materially during the year through the opening of additional offices. New offices were opened in Cleveland, Columbus, Madison, and St. Louis, to cover dairy and poultry markets. The service provided by the livestock-reporting offices at Los Angeles and Portland, Oreg., was expanded to cover the reporting of wholesale meats. Additional tobacco markets covered by the market news service included those at Claxton, Ga., Jasper, Fla., West Jefferson, N. C., and London, Ky.

Considerable progress was made in the development of new and revised United States standards, to increase their usefulness to producers, distributors, and consumers. The companion services—grading, inspection, and classification—most of which are carried on under cooperative agreements with the States, were strengthened.



Vigorous administration under such regulatory statutes as the Packers and Stockyards Act, the Perishable Agricultural Commodities Act, the Standard Container Acts, the Federal Seed Act, and the United States Warehouse Act contributed much to the development and maintenance of honest practices in the markets.

#### ORGANIZATION OF PMA

In the office of the Administrator, besides the Deputy Administrator, there were three Assistant Administrators—for the Commodity Credit Corporation, for production, and for marketing. Each Assistant Administrator directed and coordinated PMA activities within his own functional area. The PMA branches and field offices assigned to him provided the facilities for this functional coordination. In addition to the branches specifically assigned to him, all the other PMA branches reported to him on the phases of their activities that related to his functional area and acted as his staff.

The Assistant Administrator for Commodity Credit Corporation was responsible for CCC operations and program finance activities, including CCC financing, purchases, sales, inventory and related supply, and diversion operations, incident to loans, price support, foreign supply, and the diversion of domestic surpluses. This responsibility included related section-32 activities. He supervised directly the activities of the Price Support and Foreign Supply Branch, the Fiscal Branch, and the Shipping and Storage Branch.

The Price Support and Foreign Supply Branch maintained coordination between the Administrator and the commodity and functional branches that participated in CCC and related programs; provided the Administrator with specialized technical and economic program advice and maintained a follow-through system on programs to assure timely scheduling; reviewed and appraised the inventory position of commodity stocks; maintained liaison with, and procurement coordination for, other Government agencies and foreign claimants on foreign supply programs; participated in the development of domestic and international allocations, distribution, and import and export policies affecting food, materials, equipment, and supplies; coordinated PMA activities relating to the European Recovery Program of the Economic Cooperation Administration; and provided PMA and Department representation on a number of interagency policy committees.

The Fiscal Branch formulated procedures for fiscal and related activities of PMA, its agents, and others financed with PMA funds; and maintained control accounts and records, and prepared fiscal reports on PMA financial operations.

The Shipping and Storage Branch was responsible for shipping, storing, and delivering assigned commodities in accordance with export and domestic delivery programs; and served as liaison with Federal agencies and other groups on shipping and storage activities.

The Commodity Credit Corporation is a financing agency. During the fiscal year CCC utilized PMA's staff and facilities in carrying out its programs. The appropriate PMA branch, under the direction of the Assistant Administrator for CCC, developed and recommended a commodity program, which was then submitted to the CCC Board of Directors for review. Except for the Secretary of Agriculture

(Board Chairman), the Under Secretary, and the Assistant Secretary, all Board members were PMA officials. If the Board approved the recommended program, CCC financed the operation. (Activities of the Commodity Credit Corporation during the 1947-48 fiscal year are covered in a separate report.)

The Assistant Administrator for Production was responsible for production activities, including the agricultural conservation and adjustment programs, farm marketing quotas, and other PMA programs that involved direct dealings with farmers through the State and county committees. He coordinated commodity-branch production activities and coordinated all the PMA programs administered through the State and county offices. During the year he supervised directly the activities of the Agricultural Conservation Programs Branch, of the State offices, and (until December 31, 1947, when the farm-labor-supply program ended) of the Labor Branch.

The Agricultural Conservation Programs Branch analyzed results of previous programs to determine the policies likely to obtain the greatest agricultural conservation within funds available; integrated PMA planning dealing with allotments and goals, marketing quotas, parity payments and allotment payments as they affect the agricultural conservation program, and over-all land utilization; determined, on the basis of State recommendations, the need for conservation with respect to water, erosion control, range and pasture, cover and green-manure crops, and forestry, and the need for fertilizer and other conservation materials and practices; and determined current requirements and future needs for fertilizer materials, contracted for conservation materials and allocated conservation materials among the States.

The Labor Branch, while it existed, coordinated the development of programs for meeting PMA farm-labor problems; negotiated contracts with foreign governments covering the importation of agricultural workers; obtained the necessary transportation for imported agricultural workers, and scheduled all their international and interstate movements (and intrastate movements of 25 workers or more) and developed standards governing facilities used to house and feed agricultural workers; and developed programs for medical services, sanitation, and safety and accident prevention.

The Assistant Administrator for Marketing was responsible for marketing activities, which included PMA's research, inspection, service, distribution, and regulatory programs related to marketing; for programs for expanded use, through trade channels, of agricultural commodities which otherwise might become surplus; and for coordinating current marketing information on packaging, transportation, handling, and merchandising problems. He also supervised directly the activities of the Marketing Facilities Branch and the Food Distribution Programs Branch.

The Marketing Facilities Branch handled adjustments in freight rates and services for food agencies and growers, and administered section 201 (Public Law 320) of the Agricultural Adjustment Act of 1938, covering adjustments in freight rates for farm products; conducted—in collaboration with the commodity branches—research and service activities to improve marketing facilities and methods for the



physical handling of food products; administered the United States Warehouse Act, which authorizes the Federal licensing of warehouses in which agricultural products are stored for shipment in interstate commerce; inspected warehouses in which USDA-owned food products are stored; and issued cold-storage and margarine reports.

The Food Distribution Programs Branch planned and directed the school-lunch program pursuant to the National School Lunch Act; formulated domestic food-distribution programs and conducted studies of the methods of operation and economic effects of such programs; directed the operation of direct-distribution and food-preservation programs; supervised cooperative programs aimed at solving distribution problems that interfere with the wider marketing of agricultural commodities; and planned and developed Nation-wide programs for improving nutritional standards and food habits.

The Marketing Research Branch conducted research looking to technical improvement of transportation methods, packing and packaging, and wholesale and retail market and distribution practices, trade barriers, new uses, and international-trade problems which cut across commodity lines. It worked with committees on research under the Research and Marketing Act of 1946.

There were nine commodity branches: Cotton, Dairy, Fats and Oils, Fruit and Vegetable, Grain, Livestock, Poultry, Sugar, and Tobacco. They were under the administrative direction of the Administrator and the functional direction of the appropriate Assistant Administrator. For assigned commodities, these branches—

(1) Provided the appropriate Assistant Administrator with technical guidance in the formulation of programs, policies, and procedures dealing with production, marketing, adjustment, loan, purchase, diversion, export, import, price support, farm marketing quotas, processing, and distribution. The commodity branches reviewed and analyzed State-office recommendations, and made recommendations regarding the programs and policies for consideration by State offices before approval of the Administrator.

(2) Conducted marketing investigations and development work to improve handling, packaging, standardization, processing, inspection, and the development of new products, processes, and uses.

(3) Conducted inspection, grading, and market-news programs.

(4) Administered agricultural marketing agreement and order programs.

(5) Administered regulatory and marketing service acts that were assigned among them as follows: Cotton Branch—Cotton Futures Act, Cotton Standards Act, Cotton Grade and Staple Statistics Act, Cotton Service Testing Act, Cotton Fiber Testing Act; Fruit and Vegetable Branch—Standard Container Acts, Produce Agency Act, Perishable Agricultural Commodities Act, Export Apple and Pear Act; Grain Branch—United States Grain Standards Act, Federal Seed Act; Livestock Branch—Packers and Stockyards Act, Insecticide Act, Wool Standards Act; Sugar Branch—Sugar Act of 1937; Tobacco Branch—Tobacco Stocks and Standards Act, Tobacco Inspection Act, Tobacco Seed and Plant Exportation Act, Naval Stores Act.

MA had four staff units—Budget and Management Branch, Audit Branch, Compliance and Investigation Branch, and Information Branch.



The Budget and Management Branch was responsible for the budgetary procedure, administrative management, organization, personnel, and administrative-services functions of PMA.

The Audit Branch formulated audit policies and directed the audit and examining activities of PMA, its agents, and others financed with PMA funds; conducted cost analyses of commercial organizations or individuals contracting with PMA, for the purpose of providing financial data to enable PMA officials to renegotiate or terminate contracts.

The Compliance and Investigation Branch investigated violations involving food orders and PMA's programs of procurement, sales, subsidy, price support, school lunch, surplus-property disposal, agricultural adjustment and conservation, and regulation; conducted accounting investigations, and installed and serviced accounting systems for market administrators and others.

The Information Branch collected and disseminated factual information on PMA programs and operations; furnished requested information to other Government agencies, producers, processors, trade associations, newspapers, trade and general magazines, wire services, and radio stations.

The PMA State offices were a key part of the PMA field organization. Under the administrative direction of the Assistant Administrator for Production, the PMA State offices and the PMA State committees were responsible for administration in the field of the agricultural conservation and adjustment program, price-support operations (as assigned), commodity loans, Sugar Act payments, and other programs as assigned. They determined the production and marketing needs of the State on the basis of the recommendation of the county offices and analysis of other information available to the State office; they made recommendations to the Assistant Administrator for Production as a basis for formulating and modifying policies, programs, and procedures and considered Washington branch recommendations on policies, programs, and procedures. They adapted programs to State needs, and provided general guidance to county agricultural conservation committees.

A State committee had three to five members, primarily farmers, and it provided the necessary administrative connecting link between the Administrator of PMA and the county and local committees. The State committees made possible a concerted Nation-wide effort to conserve the soil. They not only administered the program in the States, but they also provided a means of incorporating locally needed conservation practices into the national program.

Every agricultural community or township in the United States had its farmer-elected committeemen. Farmers participating in the agricultural conservation program held elections in each of the Nation's 34,134 agricultural communities to name 3 of their number to membership on the local community or township committee. They also elected delegates to a county meeting at which three of the county's participating farmers were named to the county committee.

This organization of farmers, composed of about 100,000 farmer-committeemen, was the strong backbone of PMA's local operations in the field of production. The primary function of the committees was to develop program practices, adapt practices to local conditions, and provide the necessary local assistance in administering the program.

This organization handled the field activities of the Agricultural Conservation Programs Branch. The State offices assisted the Administrator in coordinating all PMA programs within the State. They carried out all PMA field activities in programs that deal directly with the farmer.

There were also PMA commodity offices in a number of cities to handle various shipping and storage, fiscal, and commodity-merchandising functions. These CCC offices were under the administrative direction of the Assistant Administrator for CCC, and received technical direction from the Fiscal Branch and the Shipping and Storage Branch. Program instructions originating in Washington PMA units were cleared through the Assistant Administrator for CCC.

In addition, each of the nine commodity branches and the four staff branches, the Food Distribution Programs Branch, and the Marketing Facilities Branch had field offices to carry out the programs assigned to them.

### AGRICULTURAL CONSERVATION PROGRAM

The 1947 agricultural conservation program was in operation in every agricultural county in the United States and in Hawaii, Alaska, and Puerto Rico. Approximately 3,000,000 farmers, operating two-thirds of the Nation's farm land and producing a substantially greater proportion of the Nation's food and fiber, carried out soil and water conservation practices under this program.

Practices varied according to the determined needs. In areas of serious water erosion the practices included such measures as terraces, contour farming, sod waterways, erosion-control dams, the seeding of grasses and legumes, and the planting of trees. Where wind erosion was more serious, practices included strip cropping, crop-residue management, and windbreaks. On range land where watershed protection is a problem they included construction of stock-water dams and development of springs and seeps, to provide additional watering places for livestock in order to prevent destructive overgrazing of better watered parts of the range. In range areas the program also stressed the seeding of adapted grasses and natural reseeding through deferred grazing also helped increase the vegetative cover needed to hold moisture on the range and prevent runoff. For more efficient use of irrigation water in the arid and semiarid sections of the country the conservation practices included land leveling, lining of canals, construction of small irrigation reservoirs, and construction and installation of improved flumes, siphons, and weirs. In sections of heavy winter rains, cover crops were planted to protect the land while it was not being used to produce the regular commercial crops.

To get the needed conservation work done, farmers were assisted with program funds. This assistance was in the form of materials, services, and cost sharing, and averaged about half of the out-of-pocket cost of the practices carried out. Farmers contributed the other half and in most cases supplied their own labor. The cost-sharing plan also served to encourage farmers to do conservation work for which they paid the entire cost. In this way the Nation's investment in soil and water conservation was more than doubled. Valued in terms of soil saved, fertility restored, increases in the efficient use of irrigation water, and the production of food and fiber which will come from these improvements, the returns will be many

times the amount provided under the program to assist farmers in carrying out these needed practices.

The 1947 program was administered by some 84,584 locally elected farmer committeemen—about 75,494 community committeemen and 9,090 county committeemen. Committeemen numbered about 1 for each 30 farmers participating in the program and about 1 for each 50 to 60 farmers in the country. These committeemen were paid for only the actual time spent in administering the program. The rate of pay generally was less than that of the hired man who took the committeeman's place while he was engaged in program work.

The committeemen in addition to administering the agricultural-conservation program, also had responsibilities in connection with price-support programs, marketing quotas, acreage allotments, the sugar program, crop insurance, and other specially assigned duties. Farmer-elected committees are an effective means of reaching nearly all the farmers in the country in 24 to 48 hours in connection with their administrative responsibilities.

#### HOW CONSERVATION NEEDS WERE DETERMINED

In 1946 a Nation-wide survey of conservation needs was made by State PMA committees. States or counties were divided typically into areas of similar conservation problems and the needs for the area were estimated. The figures thus obtained were reviewed by the State PMA technical committee which included representatives and specialists from the land-grant college experiment stations and the Extension Service, Soil Conservation Service, Farmers Home Administration, State departments of agriculture, and a member of the State committee of the PMA.

The survey provides a guide to the most important conservation needs in all parts of the country. It is the basis for the concentration of emphasis on most needed practices, it aids in the allocation of funds, and is the means of measuring progress in meeting the nation's conservation needs. The conservation needs as determined by this survey were used as a guide in formulating the 1947 agricultural-conservation program.

#### HOW THE 1947 AGRICULTURAL CONSERVATION PROGRAM WAS DEVELOPED

Early in 1946, county committees were requested to review with community committeemen and farmers the conservation practices and provisions of the current year's program and to submit to the State PMA office their recommendations for the 1947 program. This request for recommendations was made about the same time—or shortly after—the conservation-needs survey was completed. Committeemen were directed to use the survey as a guide in making practice recommendations.

State PMA committees and State technical committees reviewed these recommendations from the counties and added their own recommendations. Then the recommendations from all States were submitted to the Field Service Branch of PMA in Washington.

The recommendations were used in making up a national docket listing the practices for the 1947 program and giving the general specifications for each practice. When approved by the Secretary of Agriculture, this docket was sent to each State as authorization for



formulating a State program. Each State then considered its conservation problems and from the national docket made up a State handbook of practices with detailed specifications.

The State handbook was then used by county committees in formulating a county program and as a guide in the administration of the program in the county. Practice specifications, rates of assistance, as well as a list of approved practices, were included in a county handbook. Before the county could qualify for assistance under the program, the county committee had to determine that the conservation practices conformed to the approved specifications and use.

#### HOW THE PROGRAM WAS OPERATED

Program operation varied with States and counties, but chiefly two methods of participation were used. Most States in 1947 had what was called a farm-plan sign-up. Through press and radio the program was announced and farmers were invited to the county office or some other central meeting place to fill out a farm plan, indicating what conservation practices they intended to carry out during the calendar year 1947. No assistance was given to farmers who did not sign up before a specified date.

Under the second type of participation, the farmer came to the county office or other designated place and signed up for individual conservation practices. If the practice was not completed and reported within a set time no assistance was given. This procedure was followed throughout the calendar year or until available funds were committed.

#### HOW CONSERVATION FUNDS WERE ALLOCATED

Substantial progress has been made in adapting the program to the conservation needs of areas, counties, communities, and individual farms. For the 1948 program, this was accomplished by breaking down the national funds for program assistance to States on the basis of their conservation needs. Since drastic reductions were undesirable, the amount of reduction in the proportion allocated to any State between 1948 and 1946 was limited to 15 percent.

In most States, the State fund was similarly broken down and allocated to counties. County and community committeemen in turn allocated program assistance to farms on the basis of the conservation needs of individual farms in a large number of counties.

#### HOW FARMERS USED THE PROGRAM

Farmers were encouraged to select the most needed practices for their farms. They made their selections from the county handbook usually after discussing the conservation problems with a county or community committeeman. The county committee gave its approval of assistance after a consideration of farm needs, the farmer's desire to carry out practices, and the amount of funds available for program assistance.

A further move toward local adaptation of the program was the provision in 1947 for a local practice. Under this provision, a county committee could select a practice that was not included in either the national docket or the State handbook if it met a conservation need of farms in the county. With approval by the State committee, the

practice could be used by farmers in the county to meet a local need. Since the provision was new and untried, the amount of program funds or assistance was limited to 10 percent of the county allocation.

In soil conservation districts, some technical assistance in planning and laying out contour lines and similar operations was provided by the Soil Conservation Service. In many cases the chairman of the county committee was also chairman of the soil conservation district, and many farmers served on both committees. In most cases farmers carrying out conservation practices under the district program were encouraged and assisted in doing so by aid provided under the agricultural conservation program. Frequently it was this assistance alone that made it possible to carry out the Soil Conservation Service plan.

Where the farmer was not in a district, the program provided assistance in staking out dams, in running contour lines, and in similar operations. For the most part, however, farmers were given specifications that had to be met. They took on the responsibility for carrying out the practices in a way that would meet the specifications. Consequently, high-quality conservation work was accomplished.

The first step in conservation is to build and maintain the strength of the soil and to cut down erosion and soil losses. Under the 1947 agricultural-conservation program, 991,948 farmers spread 29,280,023 tons of lime on 14,586,210 acres of cropland and pasture. Cooperating farmers used the equivalent of 2,744,009 tons of 20-percent superphosphate to improve the growth of grass and legumes on 20,765,127 acres of pasture and hay land.

The strength of some soils has been lost. Mechanical and management methods must be used to restore them and to control erosion.

Water erosion was checked and controlled by terracing 1,677,171 acres. As outlets for these terraces and to check gulying on cropland, 1,541,021,000 square feet of sod waterways were established. Storage-type erosion-control dams built during the year numbered 48,349.

Contour farming of intertilled crops was carried out on 6,173,816 acres on 126,038 farms. Close-drilled crops were farmed on the contour on 2,564,775 acres and 49,045 farms.

The green manure and cover crop practice was carried out on 18,509,712 acres on 965,265 farms.

Pastures were established or improved by the seeding of 5,206,189 acres of adapted grasses and legumes.

To obtain better distribution of livestock in pastures and on the range, 68,930 stock-water dams were constructed. For the same purpose 2,009 springs and seeps were developed and 7,522 wells were drilled.

In the irrigated sections of the country more efficient use of limited supplies of water was obtained by the leveling of 748,545 acres of land, and the construction of 1,435 irrigation reservoirs.

To carry away excess water as a means of keeping land productive, 5,738,192 acres were drained.

As a protection against wind and water erosion, 7,068,411 acres of land were strip-cropped. Crop-residue management—the incorporation of a substantial amount of the stubble of a crop into the surface soil—was carried out on 3,509,992 acres.

As windbreaks and farm wood lots for protection against erosion, 45,155 acres of trees were planted.

At least one conservation practice was carried out on each of the 2,733,493 farms participating in the 1947 program.

Conservation needs varied in different sections of the country. What may be an excellent practice in one section may not be effective at all in another. A few examples of how the program assisted farmers in various sections of the country follow:

Climate and topography adapt the New England States to produce forage crops. Dairy cows are good converters of this feed into human food. Consumer centers furnish a good market for milk. Forty percent of the farms have five cows or more. Pasture and hay crops are effective in the control of erosion, and a livestock program helps to maintain the fertility of the land. These factors have shaped the use of the agricultural-conservation program in this area.

The first-place winner in the New England Green Pasture contest has been cooperating in the agricultural conservation program for 10 years. The use of commercial fertilizers, pasture-improvement practices, and winter cover crops have helped him develop a more productive farm as well as a prize-winning pasture. Three other top-place winners in the contest also participated in the agricultural-conservation program.

In Alabama the program helped one producer to restore a farm that had been "mined" for 50 years. It had been planted to cotton until production was no longer profitable. With the help of the program, the producer started the farm back to productivity by terracing it entirely. The eroded areas were seeded to sweetclover and black medic. Depleted areas were seeded to adapted clovers and grasses. Lime and phosphate helped the growth of legumes and grasses. This farm is now a farm on its way up—instead of on its way down to the ocean.

Logan County (Nebr.) farmers used the program to help stop a huge gully that had nearly ruined 300 acres of good cropland and was threatening thousands of acres more. A diversion terrace was constructed at the mouth of the gorge, a drainage pipe was put in, four dams were built, and other work was done to stop the waste of water and land.

The program helped a Virginia farmer to build his farm back into production after neighbors believed the land was too poor for farming. Erosion was checked and the fertility is being restored through the use of lime, phosphate, pastures, and livestock.

In the range country of Utah, a rancher used the program to ease the pressure on his summer mountain range by seeding crested wheat-grass on his fall and spring range in the valley. These seedings, along with stock-water developments, are increasing the vegetation on all his range. This is checking erosion and helping to protect the watershed. The improved spring and fall range gives the grass on the summer range a better chance to get started in the spring, a better growth all summer, and more reserves for winter.

In Montana, farmers are using strip cropping to control wind erosion. In Colorado, farmers are leveling land to get more efficient use of irrigation water. In the South, cover crops are protecting the land during winter rains.

Everywhere the program is being used to meet the problems peculiar to the area or the individual farms.



TABLE 1.—Participation in, and estimated assistance under, the Agricultural Conservation Program, by States, 1947

State	Participating farms or ranches	Cropland			Noncrop pasture			Participants	Estimated gross assistance A. C. P.	Average assistance per participant
		On participating farms	On all farms	Percent age on participating farms	On participating farms	On all farms	Percent age on participating farms			
		1,000 acres	1,000 acres	Percent	1,000 acres	1,000 acres	Percent	Number	1,000 dollars	Dollars
Maine.....	10,690	696	1,219	57.1	282	473	59.6	10,690	1,055	98.69
New Hampshire.....	5,649	228	436	52.3	204	229	89.1	5,649	800	73.82
Vermont.....	11,213	771	1,044	73.8	872	1,079	80.8	11,156	768	71.71
Massachusetts.....	8,334	342	668	51.2	246	450	54.7	8,337	74	92.12
Rhode Island.....	8,899	34	68	50.0	18	46	39.1	899	483	82.31
Connecticut.....	5,160	260	430	60.5	215	445	48.3	5,171	5,833	93.40
New York.....	65,409	5,043	8,362	60.3	3,016	6,078	49.6	65,461	11,808	89.11
New Jersey.....	11,439	5,842	8,974	86.4	113	220	51.4	11,808	1,039	89.68
Pennsylvania.....	82,438	5,407	7,582	71.3	2,102	2,860	73.5	86,746	5,358	61.77
	201,231	13,623	20,783	65.6	7,068	11,880	59.5	205,917	15,847	76.96
Ohio.....	128,146	9,090	13,731	66.2	2,342	4,268	54.9	162,989	8,381	51.42
Indiana.....	111,073	11,238	14,675	76.6	719	1,078	66.7	136,953	7,060	51.55
Illinois.....	145,564	17,745	25,108	70.7	1,708	2,766	61.7	171,831	10,693	62.23
Michigan.....	104,364	7,506	11,691	64.2	434	773	56.1	119,786	6,930	57.85
Wisconsin.....	135,264	10,172	13,128	77.5	2,745	3,673	74.7	147,175	8,034	54.72
Minnesota.....	118,474	14,078	22,123	63.6	1,837	3,166	58.0	128,268	8,335	64.98
Iowa.....	144,881	18,651	25,975	71.8	3,376	5,085	66.4	182,206	11,150	61.19
Missouri.....	130,824	12,043	19,182	62.8	4,238	7,305	58.0	140,791	11,018	78.26
North Dakota.....	48,803	19,338	25,103	77.0	9,645	13,704	70.4	50,175	6,661	132.76
South Dakota.....	36,472	10,501	17,056	61.6	16,768	27,936	60.0	39,024	5,812	148.93
Nebraska.....	76,772	12,266	21,118	58.1	14,104	25,657	55.0	93,469	7,693	82.30
Kansas.....	62,609	16,795	29,537	56.9	9,997	19,015	52.6	69,717	8,737	125.32
	1,243,246	159,423	238,427	66.9	67,913	114,426	59.4	1,442,384	100,524	69.69

TABLE 1.—Participation in, and estimated assistance under, the Agricultural Conservation Program, by States, 1947—Con.

State	Participating farms or ranches	Cropland			Noncrop pasture			Participants	Estimated gross assistance A. C. P.	Average assistance per participant
		On participating farms	On all farms	Percent age on participating farms	On participating farms	On all farms	Percent age on participating farms			
		1,000 acres	1,000 acres	Percent	1,000 acres	1,000 acres	Percent	Number	1,000 dollars	Dollars
Delaware-----	4,854	434	617	70.3	8	11	72.7	5,688	489	85.97
Maryland-----	17,832	1,606	2,491	64.5	226	352	64.2	19,496	1,914	98.17
Virginia-----	66,646	3,551	5,633	63.0	1,787	2,885	61.9	70,557	4,998	70.84
West Virginia-----	31,043	1,110	1,937	57.3	1,767	2,994	59.0	31,072	2,431	78.24
North Carolina-----	125,874	5,465	8,025	68.1	1,885	1,226	72.2	138,030	7,209	52.23
South Carolina-----	52,220	3,724	5,636	66.1	437	1,629	69.5	53,820	3,554	66.03
Georgia-----	78,714	7,063	10,450	67.6	952	1,175	81.0	85,807	6,699	78.07
Florida-----	22,388	1,343	2,714	49.5	5,882	10,135	58.0	23,472	2,568	109.41
Kentucky-----	399,571	24,296	37,503	64.8	11,944	19,407	61.5	427,942	29,862	69.78
Tennessee-----	134,500	9,827	12,178	80.7	1,471	2,003	73.4	140,326	8,368	59.63
Alabama-----	103,941	6,336	9,864	64.2	1,556	2,714	57.3	105,698	7,152	67.66
Mississippi-----	66,321	5,228	8,926	58.6	1,119	2,009	55.7	70,653	6,190	87.61
Arkansas-----	64,591	5,544	8,730	63.5	1,619	3,027	53.5	66,744	6,936	103.92
Louisiana-----	83,249	6,794	9,945	68.3	1,720	1,098	65.6	91,660	5,999	65.45
Oklahoma-----	31,098	3,116	5,795	53.8	516	881	58.6	33,225	3,843	115.67
Texas-----	70,380	7,987	18,136	44.0	7,873	15,958	49.3	73,981	7,853	106.15
-----	133,834	19,457	40,785	47.7	60,781	108,969	55.8	141,520	20,190	142.66
Montana-----	687,914	64,289	114,359	56.2	75,655	136,659	55.4	723,807	66,531	91.92
Idaho-----	16,051	7,854	12,473	63.0	22,840	52,242	43.7	16,539	3,941	238.28
-----	17,707	3,321	4,805	69.1	4,800	12,593	38.1	20,684	2,226	107.62

Wyoming-----	6,766	1,570	2,290	68.6	17,638	30,157	58.5	7,291	1,958	268.55
Colorado-----	21,747	6,677	10,896	61.3	15,173	28,880	52.5	24,782	3,997	161.29
New Mexico-----	10,282	2,032	2,856	71.1	25,816	47,620	54.2	11,440	2,612	228.32
Arizona-----	2,862	672	1,055	63.7	26,686	39,314	67.9	3,101	1,683	542.72
Utah-----	12,562	1,248	1,726	72.3	6,391	13,790	46.3	11,671	1,284	110.02
Nevada-----	1,387	1,251	7,374	67.1	3,719	5,500	67.6	1,408	429	304.69
Washington-----	20,973	5,671	7,391	76.7	6,206	9,393	66.1	21,559	3,335	154.69
Oregon-----	16,825	3,087	5,203	59.3	6,990	13,788	50.7	17,218	2,905	168.72
California-----	25,641	4,403	10,197	43.2	9,064	26,228	34.6	26,410	6,260	237.03
Continental United States-----	152,803	36,786	59,266	62.1	145,323	279,505	52.0	162,103	30,630	188.95
Alaska-----	2,684,765	298,417	470,338	63.4	307,903	561,877	54.8	2,962,153	243,394	82.17
Hawaii-----	142	5	11	45.5	9	11	81.8	142	19	133.80
Puerto Rico-----	1,161	96	287	33.4	1,250	1,635	76.4	1,161	82	70.63
Insular-----	43,726	694	867	80.0	623	673	92.6	65,218	539	8.26
Naval stores <sup>1</sup> -----	45,029	795	1,165	68.2	1,882	2,319	81.2	66,521	640	9.62
-----	23,699	0	0	0	0	0	0	3,699	695	187.89
Total-----	2,733,493	299,212	471,503	63.5	309,785	564,196	54.9	3,032,373	244,729	80.71

<sup>1</sup> Includes Alabama, Florida, Georgia, Louisiana, Mississippi and South Carolina.

<sup>2</sup> Number of participants.



TABLE 2.—Selected conservation practices carried out under the Agricultural Conservation Program, by States 1947<sup>1</sup>

State	Application of liming material <sup>2</sup>	Phosphate materials applied for conserving crops <sup>3</sup>	Mulching for erosion control	Green manure and cover crops	Construction of terraces	Contour farming		Protecting summer fallow
						Intertilled crops	Close-sown crops	
	Tons	Tons	Tons	Acres	1,000 ft.	Acres	Acres	Acres
Maine.....	96,888	15,377	5,820	2,132	1	3,440	1,595	-----
New Hampshire.....	41,360	10,036	883	542	-----	-----	-----	-----
Vermont.....	73,336	24,490	1,280	-----	5	61	7	-----
Massachusetts.....	77,559	13,306	5,967	31,562	-----	-----	-----	-----
Rhode Island.....	7,425	1,852	-----	4,276	-----	-----	-----	-----
Connecticut.....	71,847	7,081	1,425	28,931	11	-----	-----	-----
New York.....	788,761	136,986	30,172	120,667	12	-----	-----	-----
New Jersey.....	209,888	19,984	4,159	211,659	-----	3,259	-----	-----
Pennsylvania.....	1,173,790	56,368	-----	113,198	-----	-----	-----	-----
	2,540,854	285,480	49,706	512,967	29	6,760	1,602	-----
Ohio.....	1,979,201	163,451	14,032	208,363	190	8,996	5,406	-----
Indiana.....	2,668,835	135,290	2,706	173,586	987	29,973	26,917	-----
Illinois.....	4,761,340	315,856	458	731,090	661	144,752	72,650	-----
Michigan.....	904,828	123,427	17,975	505,377	-----	-----	-----	-----
Wisconsin.....	2,156,440	112,093	2,052	92,501	708	51,984	41,001	-----
Minnesota.....	347,246	53,199	2,808	887,297	96	22,296	26,661	-----
Iowa.....	3,311,591	88,055	-----	1,527,606	6,868	898,333	80,355	-----
Missouri.....	3,300,825	89,988	-----	261,132	15,861	211,825	86,257	-----
North Dakota.....	-----	1,125	-----	10,323	-----	2,363	7,434	3,110,788
South Dakota.....	-----	1,130	-----	156,486	1,657	148,720	310,087	185,916
Nebraska.....	-----	-----	-----	826,312	20,689	668,952	217,727	1,244,320
Kansas.....	1,057,007	21,943	351	176,172	31,572	215,445	383,753	2,346,492
	20,487,413	1,105,557	40,382	5,556,245	79,289	2,403,639	1,258,248	7,085,872

Delaware	73, 254	3, 469	---	74, 505	69	4, 371	1, 608	---
Maryland	341, 037	23, 228	---	120, 677	1, 112	---	---	---
Virginia	892, 080	131, 844	---	286, 875	---	---	---	---
West Virginia	412, 698	43, 953	---	8, 913	---	---	---	---
North Carolina	497, 180	79, 353	---	813, 917	20, 988	130, 905	11, 831	---
South Carolina	146, 179	37, 086	---	639, 887	10, 557	---	---	---
Georgia	296, 761	126, 372	---	1, 640, 445	32, 407	---	---	---
Florida	87, 726	86, 667	398	365, 308	1, 188	---	---	---
	2, 746, 895	531, 972	398	3, 950, 527	66, 321	135, 276	13, 439	---
Kentucky	1, 236, 606	135, 668	---	1, 044, 935	4, 249	31, 789	31, 789	---
Tennessee	951, 064	139, 442	---	911, 148	39, 962	3, 727	---	---
Alabama	294, 493	97, 236	---	834, 289	44, 478	---	---	---
Mississippi	161, 412	74, 768	---	1, 021, 566	32, 289	---	---	---
Arkansas	156, 828	56, 428	---	1, 322, 813	8, 517	301, 452	---	---
Louisiana	85, 334	31, 403	---	552, 869	10, 863	---	---	---
Oklahoma	379, 895	23, 628	---	575, 229	58, 425	479, 109	624, 839	91, 929
Texas	51, 285	117, 139	---	1, 470, 176	113, 862	2, 579, 532	495, 916	153, 343
	3, 316, 917	675, 712	---	7, 733, 025	312, 645	3, 395, 609	1, 152, 544	245, 272
Montana	49	8, 971	---	35, 266	92	345	---	59, 682
Idaho	---	18, 554	431	63, 632	8	511	21, 768	486, 004
Wyoming	---	2, 924	---	14, 948	---	436	1, 799	159, 846
Colorado	---	12, 942	390	47, 979	486	53, 487	41, 636	1, 367, 819
New Mexico	---	9, 755	---	3, 846	2, 275	176, 082	---	141, 023
Arizona	---	5, 169	---	25, 500	212	1, 068	1, 114	---
Utah	---	10, 038	657	7, 932	52	81	30, 022	205, 454
Nevada	---	724	---	620	---	---	---	---
Washington	32, 965	21, 520	60, 098	64, 695	282	---	1, 250	1, 556, 159
Oregon	62, 116	14, 875	6, 671	100, 823	---	79	23, 126	444, 854
California	92, 814	39, 816	79, 033	323, 114	207	443	18, 197	391, 187
	187, 944	145, 288	147, 280	688, 355	3, 614	232, 532	138, 942	4, 812, 028
United States	29, 280, 023	2, 744, 009	237, 766	18, 441, 119	461, 898	6, 173, 816	2, 564, 775	12, 143, 172

See footnotes at end of table.



TABLE 2.—Selected conservation practices carried out under the Agricultural Conservation Program, by States 1947<sup>1</sup>—Con.

State	Strip cropping <sup>4</sup>	Sod water-ways	Seeding or reseeding pasture and range land	Grazing land management <sup>5</sup>	Water facilities			Planting trees
					Reservoirs and dams <sup>6</sup>	Wells	Springs and seeps	
	Acres	1,000 sq. ft.	Acres	Acres	Number	Number	Number	Acres
Maine.....	2,446	5,236						43
New Hampshire.....								
Vermont.....			822					186
Massachusetts.....	53	66						83
Rhode Island.....					6			
Connecticut.....	172		33,607					34
New York.....	5,422	557	8,940		494			3,869
New Jersey.....	949	705						84
Pennsylvania.....	49,413	2,601			293			1,533
	58,455	9,165	43,369		793			5,832
Ohio.....	74,112	48,863	24,421		545			2,671
Indiana.....	2,058	42,406	25,705		511			1,630
Illinois.....	12,058	102,922	6,310		343			1,148
Michigan.....	8,853	6,375	15,676					5,543
Wisconsin.....	525,183	301,407	78,944		709			3,716
Minnesota.....	416,653	98,854	58,493					3,106
Iowa.....	35,738	282,281	33,146		18,585			5
Missouri.....		63,948	24,347		7,709			223
North Dakota.....	1,101,012	2,067	37,674	2,821,805	732	216	63	2,695
South Dakota.....	355,604	48,381	86,488		7,030	373	159	4,113
Nebraska.....	452,734	339,324	30,609		15,026	755		4,809
Kansas.....	61,361	92,811	34,285	1,551,166	3,259	562	12	578
	3,045,366	1,429,639	456,067	4,372,971	54,439	1,906	234	29,237
Delaware.....			1,993					
Maryland.....	6,726		12,970					16
Virginia.....	4,786		7,376					57
West Virginia.....	2,540	2,170			215			

North Carolina	5, 874	29, 648	143, 856	360	---	---	670
South Carolina	---	---	18, 960	---	---	---	1, 416
Georgia	---	---	383, 242	814	---	---	3, 419
Florida	---	---	88, 975	---	---	---	1, 487
	19, 926	31, 818	657, 372	1, 389	---	---	7, 074
Kentucky	---	---	---	---	---	---	---
Tennessee	---	2, 035	1, 067, 966	3, 575	---	---	706
Alabama	---	737	14, 954	4, 012	---	---	493
Mississippi	---	---	111, 003	238	---	---	118
Arkansas	---	---	241, 891	6, 616	---	---	503
Louisiana	---	3, 867	442, 728	5, 604	---	238	---
Oklahoma	---	---	215, 528	1, 048	---	---	66
Texas	---	---	396, 422	7, 947	---	---	49
	19, 710	18, 818	1, 007, 617	13, 647	434	2, 219	265
	44, 962	23, 435	---	---	---	---	---
	64, 672	48, 892	3, 497, 749	42, 687	2, 653	238	2, 200
Montana	---	---	---	---	---	---	---
Idaho	3, 395, 244	4, 873	61, 267	2, 441	574	279	138
Wyoming	2, 350	2, 119	39, 077	285	13	77	13
Colorado	245, 706	---	64, 431	1, 818	520	90	243
New Mexico	166, 375	989	83, 212	1, 351	597	95	288
Arizona	28, 112	150	11, 485	7, 323	627	40	---
Utah	20	---	867	1, 142	136	40	---
Nevada	388	83	41, 520	1, 912	42	42	28
Idaho	---	---	9, 676	1, 224	50	20	---
Washington	---	8, 782	83, 772	622	37	134	16
Oregon	1, 884	3, 194	63, 305	138	80	118	2
California	39, 913	414	116, 389	1, 122	287	602	84
	3, 879, 992	21, 507	575, 001	19, 406	2, 963	1, 537	812
United States	7, 068, 411	1, 541, 021	5, 229, 558	118, 714	7, 522	2, 009	45, 155

Practices carried out in Alaska, Hawaii, and Puerto Rico are not shown in this table.

Ground limestone equivalent,

20 percent superphosphate equivalent.

\* Includes contour and field stripcropping.

<sup>5</sup> In addition to "grazing land ma-

548 acres; California, 217,435 acres.

Includes reservoirs and dams for livestock, for erosion control (storage type), and for irrigation.



### PRICE-SUPPORT OPERATIONS

PMA cooperated with the Commodity Credit Corporation in carrying on a number of price-support programs. Prices supported, through loans or purchases or both, included those of corn, upland cotton, peanuts, tobacco, and wheat (basic commodities); dry edible beans, American Egyptian cotton, eggs, flaxseed, linseed oil, dried milk, potatoes, sweetpotatoes, and soybeans (Steagall commodities); and barley, flax fiber, dried fruits, grain sorghums, grapefruit juice, hemp and hemp fiber, honey, naval stores, oats, seeds, sugar, tung oil, and wool (other commodities).

The scope of price-support operations—as measured by purchases and new loans made—contracted somewhat from those of the previous 12-month period. Purchases and new loans made in the fiscal year 1948 totaled \$633,082,614, as compared with \$745,044,520 in the fiscal year 1947.

Net loss sustained by the CCC in the fiscal year 1948 on price-support operations was \$125,382,594, as compared with a net loss of \$42,784,596 the previous year. The net loss of \$125,382,594 on the price-support program in 1948 included losses aggregating \$55,768,386 on price-support commodities sold for foreign relief feeding, in accordance with Public Laws 389 and 393, 80th Congress. This amount is recoverable from the Secretary of the Treasury, pursuant to these statutes.

(For a detailed account of price-support operations, see the Annual Report of the President of the Commodity Credit Corporation for the fiscal year 1948.)

### FOREIGN SUPPLY PROGRAMS

The need for agricultural commodities abroad, principally in western Europe and the Far East, again called for a high level of exports from the United States. PMA cooperated in meeting these needs in two ways: (1) It procured a substantial percentage of the total tonnage of commodities exported; and (2) it assisted in the formulation and analysis of various relief programs administered by other United States Government agencies.

#### Procurement

PMA assisted the Commodity Credit Corporation in the procurement of large quantities of agricultural products needed to meet requirements of other United States Government agencies (principally those administering foreign relief programs); foreign governments; and international relief agencies.

The principal commodities purchased during the fiscal year 1948 included wheat, having a value of \$823,316,000; flour, grits, meal, and similar products, \$217,228,000; and cotton, \$60,329,000. All commodities purchased under the supply program during the fiscal year 1948 had a value of \$1,291,253,735, as compared with a value of \$1,094,161,208 for those purchased during the fiscal year 1947.

#### Staff Assistance

##### EUROPEAN RECOVERY PROGRAM

PMA cooperated with other Department agencies in studying the first report of the Committee of European Economic Cooperation

(CEECE). From this study preliminary reports were prepared on the food-production plan; total food requirements; net import requirements; fertilizer requirements (production and import); and agricultural-machinery requirements and production plans. This information was brought together in an over-all report, Preliminary Review of the Report of the Food and Agricultural Committee of the Committee of European Economic Cooperation, which was presented to the Interdepartmental Advisory Steering Committee, established to coordinate various aspects of the European Recovery Program.

PMA representatives participated as members of an Interrogating Panel, arranged to afford United States Government representatives an opportunity to discuss with CEECE representatives the proposals for a program of European recovery.

PMA representatives also participated as members of the Interdepartmental Screening Committee, established at the request of the Under Secretary of State, to coordinate food and agriculture aspects of the European recovery program. From information screened by this committee, the Department of State has published several reports including: ERP-Estimated Commodity Imports and Exports of the Participating Countries, by Value and Quantity; ERP-Proposed Distribution Under the Economic Cooperation Act by Country and Commodity; and Justification for Appropriations Under the Economic Cooperation Act of 1948.

Commodity reports, analyses, and tables prepared by PMA, were submitted by the Secretary of Agriculture and the Under Secretary of Agriculture to congressional committees of both Houses relative to food and agricultural aspects of the European recovery program.

#### CHINA-AID PROGRAM

A proposed program for aid to China was drawn up by the Department of State and turned over for analysis to a National Advisory Council Working Group on China. This group, in turn, called upon PMA for a detailed study of the program, which involved five commodities—wheat, rice, fertilizer, tobacco, and cotton. PMA analyzed China's needs for these commodities and possibilities for meeting those needs during the time period involved.

#### ALLOCATIONS

On June 30, 1948, commodities under export allocation included wheat, flour, corn, oats, barley, grain sorghums, protein feeds, rice, dry beans, dry peas, meat and meat products, fats and oils, and major field seeds.

#### SECTION 32 ACTIVITIES

Section 32 programs undertaken by PMA during the fiscal year 1948 included purchase and direct-distribution programs, to encourage domestic consumption of agricultural commodities, by increasing their utilization by donations or other means, among low-income groups; diversion programs, to encourage domestic consumption of agricultural commodities by diverting them to new uses; and export programs, to encourage the exportation of American agricultural commodities through the payment of export differentials.

Section 32 purchase and distribution programs were instituted for citrus juice, potatoes, eggs, dried fruit, honey, sweetpotatoes, shelled walnuts and filberts, fresh apples, winter pears, vegetables, and canned fruit. Obligations incurred under purchase and direct-distribution programs totaled \$52,311,716 in the fiscal year 1948, as compared with \$31,680,405 the previous year.

Diversion activities under Section 32 were relatively minor in character during the fiscal year 1948, involving only potatoes, cotton, and winter pears. Obligations totaled \$1,936,703 during the fiscal year 1948, as compared with \$6,340,774 during the fiscal year 1947.

Section 32 export programs during the fiscal year 1948 involved cotton, dried and frozen eggs, dried fruits, and tobacco. Program obligations totaled \$21,429,366 as compared with obligations of \$34,005,664 during the fiscal year 1947.

## FOOD-DISTRIBUTION PROGRAMS

### School Lunch

The school lunch program during its second year of operation under the National School Lunch Act continued to contribute materially to the development of better markets for farmers and improved nutrition for school children.

Peak participation in the 1948 program was about 6 million children, the same number as in the previous year. However, average monthly participation (September through May) was higher—5.6 million in 1948, as compared with 5.4 million in 1947. The number of lunches served was about 60 million greater than the 1947 total of 910 million.

Federal funds available for operation of the program in the fiscal year 1948 amounted to \$70,000,000, as compared with \$81,000,000 in the fiscal year 1947. Total program expenditures for all purposes were estimated at \$240,000,000. Of this total, \$143,000,000 was spent by schools for local purchases of food.

Increased food and operating costs and more applicant schools intensified the difficulty of making the appropriation meet the need. More funds than in the previous year were allocated under Section 6 of the National School Lunch Act for the direct purchase and distribution of foods—\$14,500,000 in the fiscal year 1948, as compared with \$6,000,000 in the fiscal year 1947. Trained home economists were assigned to area offices, and they, working through State agencies, encouraged the introduction of improved operating techniques, better food-purchasing practices, and wider use of alternates for higher priced foods. Finally, the payment of grant-in-aid funds was placed on the basis of quarterly participation rather than on the basis of equal installments to minimize the possibility of the States' running out of funds the latter part of the school year.

### Direct Distribution

Approximately 409,000,000 pounds of commodities acquired under section-32 programs were shipped to State agencies for distribution to school-lunch programs, eligible institutions, and welfare recipients. This was about 150,000,000 pounds more than was distributed in the fiscal year 1947. Commodities distributed included potatoes, apples,



pears, several kinds of dried fruits, shelled filberts, and shelled walnuts. (This distribution was in addition to that of commodities acquired under sec. 6, mentioned on p. 22.)

The increased volume of commodities made possible a wider distribution than in the previous year. Approximately 9.1 million individuals in schools, institutions, and welfare groups received foods acquired under section-32 programs, as compared with about 8.4 million persons in the previous year.

The number of agencies through which PMA operated in the distribution of foods was reduced from 1,400 to 160 during the year. This reduction vastly simplified administration of the direct-distribution programs.

#### Food Preservation

Higher food prices, as well as the need to prevent waste of agricultural commodities in local and seasonal abundance, encouraged more interest in food processing in community, school-lunch, and institutional canneries than was the case in the preceding year.

PMA food-preservation specialists provided increased technical assistance and advice to preservation centers on matters of equipment, sanitation, and processing techniques. These specialists also cooperated with interested State agencies in the development of food-preservation programs and the training of supervisors.

Few States have laws controlling the processing of foods in institutional canneries, so the food-preservation specialists were instructed to survey all institutional canneries processing section-32 commodities for school-lunch use to determine the adequacy of equipment, adherence to recommended sanitary practices and processing instructions, and proper supervision of canning operations.

A survey conducted to determine the number of schools canning or freezing foods for school-lunch use in 1946 and 1947 indicated a 26.8-percent increase from 1946 in the number of schools canning in 1947, and an 11-percent increase from 1946 in the number of schools freezing foods in 1947.

#### Marketing Abundant Foods

PMA placed continued emphasis on programs to encourage marketing of foods in abundant supply through normal channels of trade.

Backbone of this program was the monthly list, *Foods in Plentiful Supply*, which was distributed nationally through food-trade organizations, press services, and radio networks. The list was also distributed locally to the food trade, newspapers, and radio stations. Of particular significance has been the extent to which food editors and the trade have used the list in the selection of items for special emphasis in recipe columns and food advertisements.

In addition, special food-marketing programs were conducted for commodities the abundance of which required more intensive promotion. In July and August of 1947, for example, an all-out campaign was launched to encourage the consumption of peaches. Eventually, over 74,000,000 bushels moved through commercial channels, a volume exceeded only by that of the preceding season. Similar programs were conducted for potatoes, dried figs, and stewing chickens.

PMA conducts such programs with the full support of trade groups. Constant liaison is maintained with trade organizations and their advice and counsel are sought in the development of the programs. No program is launched without the general agreement of major industry groups, and the timing of programs is geared to harmonize with the merchandising plans of the food trade.

#### Nutrition Programs

PMA services a coordinated program of education in nutrition through an organized channel of Federal, State, and local nutrition committees that include private as well as public groups. The Federal committee is an interdepartmental committee that cooperates in this work.

Reports received during the year from about 40 actively functioning State nutrition committees and city nutrition committees in New York City and Chicago show that most of them gave considerable impetus to many programs, especially the school-lunch program. Some of their school-lunch activities were directed toward (1) building community support to establish or extend the school-lunch program; (2) giving professional advice and assistance to school-lunch administrators and workers; (3) conducting surveys of children's eating habits and nutritional status to determine the most common deficiencies in their diets; (4) utilizing the educational opportunities of the school-lunch program to teach the elements of good nutrition; and (5) training school-lunch personnel.

A survey made in Richmond, in cooperation with the Bureau of Agricultural Economics, revealed that slightly less than half the homemakers interviewed had some knowledge of the principles of nutrition according to the standards set up for the survey; a very small percentage had adequate information, and about half possessed little or none. About half the homemakers interviewed provided an adequate daily diet for their families.

PMA cooperated extensively with the food industries and organizations such as the Nutrition Foundation in programs designed to widen the application of nutrition knowledge.

Twelve four-page issues of the Nutrition News Letter were prepared during the year, one each month. These issues contained accounts of activities of national, State, and local nutrition committees, descriptions of educational techniques, and outstanding experiments in community nutrition-education programs.

#### National Garden Program

A goal of 20,000,000 freedom gardens was announced by the Department in October 1947. In the fall of 1947 and in the early months of 1948 a series of regional conferences was jointly sponsored by the Department and State extension services. At each of these conferences Federal and State officials and local garden leaders developed plans to launch the 1948 program in the area and to provide assistance to home gardeners.

The Department assumed responsibility for the broad organization activities and administrative direction necessary to encourage and to assist local groups to assume leadership in the garden program in

their communities. In carrying out this responsibility the Department (1) developed plans of action to guide community leaders and local garden groups; (2) provided technical assistance, through the extension services, to rural and urban home gardeners; and (3) released information on garden care, garden and canning supplies and equipment, methods of food preservation, insect control, and other practical information for the home gardener.

#### Fat Salvage

PMA continued to cooperate in an industry-sponsored fat-salvage program by encouraging schools and institutions to save and turn in all fats no longer suitable for cooking use.

### CROSS-COMMODITY MARKETING RESEARCH

Cross-commodity marketing research—that is, research applicable to a number of different commodities—was initiated during the fiscal year to improve marketing methods and practices. Much of this work is carried on by PMA alone but some is conducted in cooperation with other Federal and State agencies and in a few projects is handled by private research organizations under contract. Practically all of the work is being done under the authority of the Research and Marketing Act.

During the year work was initiated in several broad fields including (1) the prepackaging of perishable food products; (2) reducing loss and damage in transportation; (3) market news; (4) grades and standards; (5) market-service activities.

#### Prepackaging of Perishable Food Products

A number of growers, shippers, wholesalers, and retailers have been experimenting during the past few years with the packaging and retailing of perishable food products in consumer packages. The major objectives of these experiments have been to increase the salability of the product, improve the quality and reduce waste and spoilage losses, and develop more efficient methods of marketing. The early development of prepackaging has taken place for the most part in the terminal markets. These operations have been the subject of considerable study. Although some of these experiments have not been entirely successful, they indicate considerable possibilities and the need for further experimentation and analysis. One of the major problems is to coordinate the work at the terminal and retail markets with that at the shipping points. The question of where and how the prepackaging should be done is a most important one. Many difficult problems are involved in marketing of perishables prepackaged at country shipping points. The extent to which these problems can be solved or offset by savings resulting from the elimination of "repacking" costs at terminal markets and the transporting of trimmings and other waste material, or by the advantages of carrying the producers' or shippers' brands to the ultimate consumer, needs to be explored.

Initial work during the year was carried out in cooperation with the Florida Agricultural Experiment Station and the Florida Vegetable Prepackaging Council and also under cooperative agreement with



the Maryland Agricultural Experiment Station and E. L. Duvall & Son, Inc., Baltimore, Md. Under the Florida program over a million consumer packages of tomatoes, cauliflower, broccoli, and sweet corn were shipped to over 30 terminal markets in the Northern and Eastern States during the past season.

Data were collected on the comparative cost of harvesting and prepackaging these vegetables with the cost of shipping them in the usual bulk manner. These data included cost of packaging material, equipment, and supplies.

Time studies were made to measure the cost and productivity of labor required to prepare prepackaged and bulk products for shipment. Comparative costs of transportation and charges for services for wholesalers in the terminal markets were gathered. Retail cost and margin comparisons for the handling of prepackaged and bulk products and the relative amount of spoilage losses were made in a number of retail stores.

In addition to the cost analysis, the investigations, when completed, will also show the comparative net returns to growers for products merchandised in prepackaged and in bulk form.

Consumer-acceptance studies were also made by inserting questionnaires within the consumer packages. These surveys, as well as the sales data collected in the retail stores, were obtained to determine the relative consumer reaction to products prepackaged and merchandised under various conditions.

Two reports showing the results of the year's experimentation are now in process of preparation. Although the results of 1 year's experimentation are not adequate for formulating final conclusions, preliminary examination of the data collected indicates that the prepackaging of certain Florida vegetables has sufficient merit to justify further experimentation by growers and shippers.

Similar data on the cost of prepackaging other vegetables at the terminal-market level were obtained in the Maryland study, and a publication on this phase of the project is also in process of preparation.

#### **Reducing Loss and Damage in Transportation**

Loss and damage in transportation of fruits, vegetables, eggs, and fresh meat are the principal sources of the physical waste that has long characterized the marketing of these perishables. In 1944, for example, loss and damage to these commodities cost the railroads in the United States an estimated \$15,000,000. Losses suffered by shippers, wholesalers, and others connected with the handling of these commodities probably were even larger. Each year an equivalent of almost 2,000 cars of watermelons fail to reach the consumers because of loss, damage, and deterioration in transit. The same is true of many other perishable commodities. A substantial part of this loss is directly attributable to inefficient methods of packaging and loading of these commodities for shipment.

Research designed to improve packaging and loading of various agricultural perishables offers two opportunities to accomplish important improvements in marketing these products—the opportunity to eliminate much of the waste now prevalent and thereby reduce marketing costs, and the opportunity to improve the quality of the products reaching the ultimate consumer. The type of packaging and loading

employed in marketing and transportation of agricultural perishables determines to a large degree the amount of physical damage such as breakage, bruising, and contamination which the products are likely to suffer on the way to various market channels. These same factors also have an important bearing upon the efficiency in ventilating and refrigerating these commodities during transit, storage, and marketing. These factors in turn affect the quality of these commodities when they reach the ultimate consumers.

Field work in a study designed to reveal the relative efficiencies of the 1-bushel tub basket and the wire-bound Spartan box for shipping and handling peaches, which involved shipping-point and terminal-market inspection, packing and loading costs, in-transit temperature recordings, and retail-spoilage studies of approximately 200 carloads of Georgia and South Carolina peaches, was completed during the year. The basic data thus obtained are now being analyzed and a report covering the findings of this investigation is now in process of preparation.

Records of the loss and damage on 14,236 cars of cantaloups, 7,327 cars of peaches, 2,332 cars of eggs, and 17,317 cars of watermelons unloaded at 65 terminal markets throughout the United States have been collected under contracts with two railroad inspection agencies. This loss and damage information is also being supplemented with data on the cost of loading and bracing cantaloup shipments which have been collected by the field men of the Association of American Railroads in California and Arizona and with data on the cost of loading watermelons in Georgia, South Carolina, Florida, Oklahoma, Texas, and California collected by the extension services in those States. Reports on loading and bracing shipments of eggs, cantaloups, and watermelons are now being drafted.

The information which has been obtained from reports of railroad inspection agencies and the Department inspection services will provide the basis for an evaluation of the various containers, loading, bracing, and handling methods now used in the marketing of these commodities. This information will show what type of container provides the most efficient protection for its contents during transportation and marketing. In addition, these data will also reveal which type of railroad equipment carried shipments of these commodities with the least damage and also the varieties of commodities which carried best. The information on the cost of packaging and loading these products, when related to the cost of the damage involved, will show whether it is economically feasible to eliminate a large part of the wastage involved in transporting and handling these products.

#### Market News

To a considerable extent cross-commodity work on market news and grades and standards represents self-analyses by PMA of its service activities in these fields, the purpose being to improve the service. An appraisal of many problems in these fields can be made most effectively by personnel not directly engaged in the service work. Also many of the problems are common to all commodities and can be dealt with most effectively on a cross-commodity basis.

Among the market news problems being studied are (1) the market

news needs of producers, processors, handlers, and consumers; (2) the extent to which the present service meets these needs; (3) the extent to which the present market news is being used; (4) the general accuracy and timeliness of the present service; (5) the form and readability of reports; (6) the most effective media of dissemination; and (7) the feasibility of a retail market news service.

Special emphasis is being placed on problems of market news presentation. The descriptive terms used by market news reporters have been tabulated according to frequency of use and the results have been analyzed as a basis for making more uniform the terms as now used in the different market news services and in the principal cities. Modern formats, such as are used with success by some of the outstanding commercial news reporting organizations, are being studied as to their suitability for market news. All market news reports have been examined to determine their suitability for grading by the Flesch Readability Formula. Sample reports have been rewritten to bring their reading ease up to "standard" or better. The results of these studies have been made available to the commodity branches for their use.

A cooperative agreement has been entered into with Iowa State College to study problems of market news dissemination. A State-wide survey has been undertaken to (1) evaluate the effectiveness of market news in serving the needs of farmers and marketing men; and (2) to compare the effectiveness of market news dissemination by radio, press, and mail reports.

An experimental market news project is being conducted in Baltimore, Md., to test methods of reporting daily retail prices, monthly sales volume, and inventory of agricultural products. The city has been broken down into homogeneous districts on the basis of census information on race and rentals, and food stores have been stratified on this basis and also on the basis of size, type of organization (chain or independent), service rendered (supermarkets, other self-service stores, or service stores), and commodities handled (groceries or groceries and meat).

Two experimental methods of collecting retail-price and sales-volume information are being tested: The first draws the data entirely from retail stores and involves an elaborate base sample. The second collects volume-sales data from wholesalers, and the retail inventory and price information from the retail stores.

#### Grades and Standards

Grades and standards of the Department of Agriculture have been developed more or less independently as the need arose and have been based largely on market practices and conditions existing at the time of their adoption. There is a need for an over-all review of how well they are now meeting the needs of producers, trade groups, and consumers.

To increase the usefulness of grades and standards special attention has been given to the problem of developing greater uniformity. All United States Department of Agriculture standards have been classified and cataloged, together with those issued by the Food and Drug Administration and the National Bureau of Standards and the specifi-



cations of the Federal Specifications Board. Copies of all the State standards have been obtained and comparisons are being made with the USDA standards. In order to simplify and standardize grade terminology used by the Department, an evaluation of the terms used and the methods by which they are used has been prepared for presentation to the Grades and Standards Committee of PMA.

To reconcile the differences between USDA standards and Federal specifications, and thus strengthen both of them, detailed comparisons are being made. This work has been completed for canned fruits and vegetables and dairy products. Suggested revisions of Federal specifications for certain dairy products have been prepared which would bring them in line with USDA grades.

An evaluation of grades and standards has been undertaken to test the suitability in meeting market requirements. One phase of this evaluation involves an appraisal of the relationships of the different grades and their individual quality factors to price. These price-quality relationships are being measured and present standards evaluated in terms of the findings. A pretest study has been made on grades of ice-packed poultry from the Delmarva Peninsula.

#### Market Service Activities

For many years the Department of Agriculture has cooperated with the States in a number of service activities such as crop and livestock estimates, market news, and inspection and grading. While the functions of the various State agencies differ somewhat from State to State, these service activities are customarily carried on by the State departments of agriculture or bureaus of markets as contrasted with the research activities of the State experiment stations and the information and demonstrational activities of the State extension services.

To facilitate the administration of additional market service work in cooperation with the States made possible by the Research and Marketing Act, PMA has been authorized to assist in the development of this work and to enter into cooperative agreements with the appropriate State agencies. During the past year, cooperative agreements have been undertaken on a matched-fund basis with 20 States.

Insofar as practicable, these programs are designed to provide additional marketing services instead of merely expanding existing services such as market news inspection. The nature of the work varies widely from State to State, depending on their particular and most urgent needs. It also varies in accordance with the number and relative importance of the commodities produced.

The work of the States under these cooperative programs is of three main types:

- (1) Collecting, analyzing, and disseminating special market information not previously available which is needed in the development of marketing programs in the States.

- (2) Developing, in cooperation with local trade and other groups, a program for improving the quality of products and methods of packing, processing, handling, standardizing, and merchandising as a means of expanding market outlets and finding new uses and new markets for agricultural commodities.

(3) Assisting individual marketing agencies in improving their facilities, operations, and service and business policies to increase their effectiveness in marketing farm products.

In working with the States in developing an effective market service program, 56 lines of work have been approved. PMA has been in close touch with State agencies and has rendered advice and technical assistance as requested.

### MARKETING FACILITIES

One PMA job is to improve the physical handling of farm and food products throughout the marketing channel. This work includes planning and promoting the establishment of better market, storage, and transportation facilities; determining whether available facilities will be adequate to take care of the products that will move to market, and developing and conducting programs to provide needed facilities; administering the United States Warehouse Act and inspecting certain warehouses not operated under this act; issuing reports on warehouse stocks; and taking action necessary to obtain equitable freight rates. The purpose of these activities is to keep marketing costs as low as possible through improved efficiency and to make possible the movement of the maximum quantity of farm and food products through the marketing channel to the consumer, in the best possible condition.

#### New or Improved Market Facilities

During the year the Administration worked on planning and promoting necessary market facilities in 28 cities and production areas. In these areas, located in 17 States, present ways of handling fruits, vegetables, poultry, eggs, butter, meat, frozen foods, and other products were analyzed to determine defects in existing facilities and to find out to what extent marketing costs could be decreased by remedying the defects. The kind, size, and number of facilities needed to handle the products efficiently were determined. A report on each study showed the kind and size of facilities needed; the best location for and the cost of constructing them; the manner in which they should be managed and operated; rentals that would have to be charged for their use; financial arrangements that might be made; the savings that would result from operating in them, as compared with the cost of operating in existing facilities; and the benefits that would accrue to the farmer, the distributor, the consumer, and the locality from carrying out the recommended plans.

When the necessary information on each market has been collected and analyzed, representatives of the Administration meet with local representatives—State and city officials, farmers, distributors, retailers, warehousemen, officials of transportation agencies, chambers of commerce, and others—who are interested in improving the market facility involved. After a complete exchange of views, a report is published, after which PMA continues to help interested agencies to find ways of getting the facilities built and put into operation.

In 14 of the 28 localities under investigation, studies were completed during the year. In 9 cases the results have been published; in the other 5 the final reports are being written. Markets in 2 of the cities

were built during the year, and in 8 others land was bought or an organization was set up to make building plans.

To aid the rapidly growing frozen-foods industry, the agency continued a study previously undertaken to determine the best kinds of facilities currently being used to handle frozen foods and the inadequacies of other facilities. PMA obtained data from about 350 frozen-food distributors in more than 40 major cities, as well as from a large number of retail-grocery-store operators, refrigerated-warehouse operators, and locker-plant and packing-plant operators.

#### Warehousing Facilities

As in the past, the Administration made investigations in advance of the harvest season to determine in what areas there would not be enough warehouse space to store certain commodities. When it appears that shortages will occur, programs for dealing with them are developed. This year, the supply of warehouse space was adequate for handling most commodities; problems developed only in the storage of grain and of some commodities requiring refrigerated space.

Regular surveys were made of the capacity of all cold-storage warehouses of the country, by type of warehouse, type of space, and area. From all these warehouses PMA obtains monthly reports on the quantities of products stored and the amount of space occupied, and on the basis of this information issues a monthly cold-storage report. The agency also cooperates with the Department of the Interior in compiling and issuing a report on the monthly holdings and freezings of fish, and issues a monthly report on United States production of margarine. Other special reports on warehousing facilities and cold-storage stocks are issued.

#### Warehouse Supervision

PMA conducts two types of warehouse-supervision work—administration of the United States Warehouse Act, and inspection of warehouses used for storing certain commodities owned by the Commodity Credit Corporation.

Through the 1,349 warehouses licensed under the United States Warehouse Act several billion dollars' worth of farm products moved during the year with no storer of any product suffering any financial loss because of any mishandling or improper storage practice engaged in by any warehouseman. Warehouse examinations numbered 4,126. Other work done under the act included (1) studies of tariffs, their form, and the need for changes; (2) an analysis to determine the proper way of handling overflow grain which could not be stored in the country elevators; (3) a checking of insurance coverage to make certain that it was sufficient; and (4) an investigation of certain solicitations of grain on the basis of an offer of free storage.

In addition to the supervision of warehouses licensed under the United States Warehouse Act, PMA inspected 600 warehouses storing commodities owned by the Commodity Credit Corporation. The products involved were: Processed fruits, vegetables, dry skim milk, dried eggs, frozen eggs, meats and meat products, fish, flour, dry beans, cereals, cheese, and potatoes.

During the year the agency also inspected about 600 warehouses that stored wool for CCC.



### Handling-Equipment Studies

Studies were begun in order to determine how much the unnecessary costs of handling in market places, in warehouses, and to and from railroad cars and tracks might be reduced through the use of various kinds of labor-saving machinery. The packages used in the study were bushel baskets of apples and peaches, 50-pound bags of cabbages, standard boxes of citrus fruits, 100-pound bags of potatoes, bushel hampers of beans and peas, crates of lettuce, lugs of tomatoes and grapes, bales of cotton, and bunches of bananas. By the end of the year, 1,064 individual observations of handling the packages with various kinds of equipment had been made in 16 cities throughout the country. Results observable thus far indicate that the man-hour requirements for handling various commodities could be reduced materially and that money could be saved.

### Transportation Facilities

Most of the Administration's work on transportation facilities was for the purpose of predicting where shortages of railroad equipment might develop and planning and carrying out programs to prevent such shortages. For example, a record crop of wheat in 1947 placed a heavy burden on the railroads. Before the harvest, PMA conducted a survey of transportation and storage facilities in each of the major wheat-producing States. Obtaining estimates of production by crop-reporting districts in each State, it calculated approximately how much farm and country elevator grain-storage capacity would be available at harvesttime, and how much grain would have to be moved by the railroads to other areas to prevent spoilage. The survey results were made available to the individual railroads affected and others. As a consequence, the railroads made exceptional efforts to move into the critical areas as many boxcars as possible.

Advance requirements for refrigerator cars were determined by areas and commodity groups. Many other actions dealt with car shortages in particular areas. As a result, in most cases relief was given before production and marketing were seriously hindered.

Upon recommendation of the Transportation Advisory Committee, set up under the Research and Marketing Act of 1946, a study was begun late in the year to determine the extent of car delays, their causes and cures. When the year closed, records had been obtained on the movement of more than 10,000 cars loaded with farm products.

### Transportation-Rate Adjustments

Because of rising transportation operating costs, the year was characterized by extreme efforts by transportation agencies to increase freight rates. Transportation-rate specialists of the Administration spent a great deal of their time in trying to hold these increases down to a point which would leave the carriers a fair return on a fair valuation of their property investment over and above their costs of operation under economical management. PMA participated in 121 formal proceedings before the various transportation regulatory agencies. In addition, the agency in a large number of cases worked directly with the carriers in an effort—successful in many cases—to obtain the desired results without resort to formal actions before

regulatory bodies. Savings in transportation charges during the year resulting from actions participated in by the agency are estimated at \$190,000,000.

A number of transportation-rate actions conducted during the year affected each of the 48 States. No State was affected by fewer than 43 actions.

In the most important single case participated in, the railroads sought general increases in their rates amounting to 41 percent for a part of the country and 31 percent for the rest. PMA prepared its own estimates of traffic volume, railroad revenues, expenses, and the probable rate of return that would be achieved with various percentage increases in rates. As a result of the ensuing hearing before the Interstate Commerce Commission, the railroads were granted, first, an increase of 10 percent, and, later, an increase of from 20 to 30 percent, depending on the part of the country affected.

PMA has opposed the granting of general rate increases to trucking lines merely because railroad rates have been increased. The agency's position is that full hearings should be held to determine what trucking-rate increases—if any—are necessary. During the year, in an attempt to obtain such hearings in the trucking field, the agency prepared extensive exhibits and presented them to the Interstate Commerce Commission to show that certain groups of trucking lines, which were requesting large rate increases, were already earning a net return of from 20 to 30 percent on their investment.

#### SHIPPING AND STORAGE

PMA delivered approximately 30,573,000,000 pounds of commodities during the year under domestic and foreign programs. Commodity-wise, the totals were as follows: Wheat, 17,727,000,000; flour, 3,782,000,000; other whole grains, 1,853,000,000; fresh vegetables, 2,412,000,000; dairy products, 332,000,000; rice, 252,000,000; cotton, 196,000,000; eggs, 78,000,000; and all other commodities combined, 3,941,000,000.

The shortage of boxcars continued as a problem in the movement of grain for export. This problem was eased by the use of inland waterways, whenever possible, and also by exporting substantial quantities of grain from ports on the Gulf of Mexico, which were relatively closer to the source of the grain supply than were Atlantic and Pacific ports.

Record exports of grain accentuated the need for exact scheduling of ships to avoid misuse of transportation and port facilities. By controlling the flow of grain to port and by maintaining close liaison with claimants, PMA, however, was able to maintain adequate schedules with a minimum of difficulty.

In all, 219 vessels were chartered by PMA for the export of whole grain, and arrangements were made whereby 1,867,000,000 pounds of processed commodities were shipped on a berth-to-berth basis. This method of obtaining ocean-shipping space resulted in savings on ocean transportation of whole grains of approximately \$6,900,000 and on processed commodities of about \$1,700,000. As a result of provisions inserted in charter parties, which permitted the reversibility of lay days, additional savings in the approximate amount of \$325,000 were made.

Storage space was adequate throughout the fiscal year 1948 for PMA- and CCC-owned commodities. Commercial storage was utilized for nonbasic commodities in all cases, with the exception of leased space in the Natural Cooler Facility, at Atchison, Kans., and in the Bronx Terminal Market, at New York City. Use of these leased facilities, it is estimated, resulted in a saving to the Government of more than \$512,000.

The hurricane that struck the Gulf coast in September 1947 damaged considerable quantities of Government-owned agricultural commodities at Gulfport, Miss. Some stocks were complete losses, but a large part was salvaged after extensive reconditioning work. Despite the seriousness and extent of the Columbia River flood in May and June, Government-owned agricultural commodities in that area suffered no damage. As soon as first flood warnings were received, PMA took steps to move endangered commodities to safe areas.

PMA cooperated with the Munitions Board Stockpile Committee by conducting research on the storage of strategic and critical agricultural commodities. PMA also cooperated with the sponsor of the Friendship Train by furnishing information on the loading and bracing of cars and the preparation of shipping documents as donations were being collected, and by segregating, repackaging, and marking the donated foods prior to loading on ships for export to France and Italy.

PMA developed informational data in manual form for ready reference by those performing shipping and storage operations within PMA and by warehousemen and vendors. These manuals, entitled "The Warehousemen's Guide Book," "Practical Transportation," "Refrigeration and Heater Guide," "Freight Billing Guide," "Commodity Care," and "Shipping and Billing Information for Vendors," have assisted PMA materially in performing its functions in the handling, preservation, shipping, and storage of foodstuffs.

#### COMPLIANCE AND INVESTIGATION

Investigations relative to actual or suspected irregularities in the operation of PMA programs totaled 1,266 during the year. Fifty-eight criminal cases were successfully prosecuted. Jail sentences to serve totaled in excess of 9 years; suspended sentences totaled 14 years and 6 months; and total probationary time was 33 years. These criminal cases also resulted in the Government's receiving a total of \$177,000 in fines. Recoveries—money fraudulently or improperly obtained—totaled \$693,000. Savings—claims made but not paid—amounted to \$190,000. Collections—delinquent loans and penalties incurred under marketing-quota programs—amounted to \$158,000. Three cases are illustrative of the investigation work handled.

On the basis of information that reginned (ineligible) cotton had been included in export shipments on which subsidy payments were claimed, PMA made a survey of reginning plants and found that 46 export firms had claimed and received Government export payments amounting to \$202,865 on 10,412 bales of reginned cotton. Of these firms, 45 refunded to PMA the total amounts improperly claimed—\$200,851. The other firm, which claimed and received \$2,014, is now out of business and insolvent.

In a Middle Western State two potato dealers were convicted of salvaging and selling commercially potatoes that had been placed



under loan and had been dumped. The principal was fined \$2,500 and sentenced to 3 years in prison, while his accomplice received a prison sentence of a year and a day.

Five defendants who had conspired to steal 500 cases of Government-owned soap and dispose of them in regular commercial channels, were convicted. Fines totaling \$4,000 and jail terms were imposed on four of the defendants. A civil suit is pending in the United States district court through which the Government hopes to recover the value of the stolen soap, plus transportation charges. An important part of the evidence which led to the indictments and ultimate convictions was the testimony of a PMA handwriting expert in connection with certain spurious receipts offered by the defense as evidence that the shipments had actually been delivered to the docks.

The natural trend away from wartime emergency programs was practically completed during the fiscal year 1948, and compliance and investigation work was almost solely concerned with the normal peacetime programs of PMA. Illustrative of the trend is that in the fiscal year 1946 almost 50 percent of the investigations involved war food orders; in the fiscal year 1947 war food order investigations comprised about 30 percent of the total cases reported; but in the fiscal year 1948, the number was negligible in comparison with the total work load. However, due to the normal lag between investigation and final action, a number of important food order cases remain to be disposed of in the courts.

#### AUDIT ACTIVITIES

PMA completed 2,570 audits during the 1948 fiscal year, as compared with 1,642 in 1947, and 1,568 in 1946. These audits covered activities of the Commodity Credit Corporation as well as those of PMA.

Although the primary purpose of the audits is to serve management as part of the system of internal control, potential savings or recoveries are frequently developed.

#### LABOR

The Government maintained labor-supply centers, labor homes, labor camps, and other facilities and services under provisions of the Farm Labor Supply Program (Public Laws 45, 40, and 76) until December 31, 1947, when the program ended.

On July 31, 1947, Congress passed a law (Public Law 298, 80th Cong.) which authorized the Secretary of Agriculture to dispose of any farm-labor-supply center, labor home, labor camp or facility, and any equipment used in the Farm Labor Supply Program to any public or semipublic agency or any nonprofit association of farmers in the community that would agree to operate and maintain such facilities for the principal purpose of housing persons engaged in agricultural work and to relieve the Government of further responsibility in connection with the program.

In order that such public or semipublic agencies or nonprofit associations of farmers may have enough time to make necessary arrangements, the authority to dispose of such facilities is to continue until June 30, 1949.

On December 31, 1947, when the Farm Labor Supply Program ended, there were 53 permanent camps, approximately 110 temporary

camps, about 20 field offices, and a substantial amount of stored equipment and supplies designed for the service of the Department's entire farm-labor camp and foreign farm-labor program. In addition, much camp equipment was on loan to farmers and farm groups for the purpose of housing agricultural workers on sites not leased by the Government.

As the fiscal year ended, the disposal of the facilities and equipment of the labor-camp program was being carried out in line with the requirements of Public Law 298. Several permanent camps, a majority of the temporary camps, and the equipment and supplies essential for continued operation were sold to eligible purchasers who had made reasonable offers under the provisions of the act. Many other surplus items were sold to the highest bidder under Public Law 731. Offers were accepted for 8 of the 53 standard or permanent camps. All except one of the 110 temporary camps were sold, and several school facilities located on standard camps were dedicated for public school purposes to the local school districts. At the end of the year, purchasers for the remaining permanent camps were being sought. Pending sale, all these permanent camps were being operated by public agencies, semipublic agencies, or nonprofit associations of farmers at no expense to the Government.

All sales under Public Law 298 were to public agencies or nonprofit associations of farmers for use in housing agricultural workers. The revenue from these sales amounted to \$586,638.46. Sales completed to the highest bidders under Public Law 731 (the Farmers Home Administration Act of 1946) brought \$199,224.83 in revenue. The Public Law 731 disposals included facilities and equipment no longer necessary for use in agricultural housing or for which no reasonable offer had been received from eligible purchasers. Table 3 shows the sales of permanent and temporary farm-labor camps and the total recovery from sales of miscellaneous camp equipment. These sales include all camps for which offers had been accepted.

TABLE 3.—*Total receipts from disposal of permanent and temporary farm-labor camps, and sales of miscellaneous camp equipment from warehouses, camp sites, and field offices under Public Laws 298 and 731, as of June 30, 1948*

DISPOSITION OF PERMANENT CAMPS		
Permanent camp	Sold under Public Law 298	Sold under Public Law 731
Name and location:		
Springdale, Ark.....	\$10, 000. 00	-----
Harlingen, Tex.....	22, 000. 00	-----
Lamesa, Tex.....	42, 000. 00	-----
Raymondville, Tex.....	62, 000. 00	-----
Robstown, Tex.....	48, 000. 00	-----
Arbuckle, Calif.....	-----	\$20, 110. 00
Rogers Road, Calif.....	-----	5, 100. 00
Mineral King Warehouse, Calif.....	-----	17, 550. 00
Palisades, Colo.....	7, 800. 00	-----
Belle Glade Hospital, Fla.....	100. 00	-----
Total.....	191, 900. 00	42, 760. 00

TABLE 3—Continued

## DISPOSITION OF MISCELLANEOUS CAMP EQUIPMENT

Item	Sold under Public Law 298	Sold under Public Law 731
Camp equipment from warehouses, camp sites, and field offices.....	\$190, 744. 11	\$146, 271. 44

## DISPOSITION OF TEMPORARY CAMPS

Item	Sold under Public Law 298	Sold under Public Law 731
Temporary camps sold on site.....	\$203, 994. 35	\$10, 193. 39
Total receipts from all disposals.....	586, 638. 46	199, 224. 83
Grand total.....	785, 863. 29	

## COTTON

## Prices

The average price of Middling  $1\frac{5}{16}$ -inch cotton in the 10 designated spot markets varied considerably through the fiscal year 1948. The price dropped from about 37.50 cents per pound in July 1947 to about 31.55 cents in September. Then it increased to about 35.80 cents in December, but dropped to 32.75 cents in February 1948. It increased to about 37.55 cents per pound in May and declined again in June.

## Loan, Purchase, and Export Programs

Loans were made on about 280,000 bales of 1947-crop upland cotton at an average rate of 26.49 cents per pound for Middling  $\frac{7}{8}$ -inch cotton, gross weight, which represented  $92\frac{1}{2}$  percent of the parity price as of August 1, 1947. The quantity placed under loan was about  $2\frac{1}{2}$  percent of the 1947 crop of 11,550,000 bales, as compared with loans on about 141,000 bales or  $1\frac{2}{3}$  percent of the 1946 crop, 215,000 bales or  $2\frac{1}{2}$  percent of the 1945 crop, and 2,100,000 bales or nearly 18 percent of the 1944 crop. Entries into the loan were fairly uniform throughout the season, except for a sharp rise late in October and November, just prior to the November price advance, and a nominal increase, which accompanied the price dip in February.

Producers redeemed about 250,000 bales of cotton, of which about 12,000 bales were from the 1946 crop and 238,000 bales from the 1947 crop. Loan stocks on June 30, 1948, totaled about 42,000 bales.

About 2,000 bales were pooled for producers' account from the 1946 crop. All 1946-crop cotton pooled for producers' account has been



sold and the net proceeds will be distributed during the 1949 fiscal year to producers having cotton in the pool.

Loans were made on 450 bales of 1947-crop SxP cotton at an average rate of 56.70 cents per pound, net weight, for grade No. 2, 1½ inches, which represents 90 percent of the parity price for this quality as of August 1, 1947. On June 30, 1948, loans were outstanding on about 30 bales of this cotton. The 1946-crop SxP cotton that had been pooled, a total of 939 bales, was sold during the year and net proceeds will be distributed during the 1949 fiscal year.

No inventory of upland or SxP cotton was on hand on June 30, 1947, or on June 30, 1948.

Under the cotton-sales-for-export program, announced in November 1944, about 960,000 bales of cotton were registered for export and 15,000 bales were canceled during the year. Export payments—made at the rate of ½ cent per pound to March 3, 1948; at ⅓ cent per pound from March 3 to June 23, 1948; and at 10 cents per bale from June 23, 1948, to the end of the fiscal year—totaled \$2,044,036 on the 945,000 bales. This program was carried out under Section 32, Public Law 320, 74th Congress, as amended.

Under the Japanese Cotton Agreement, 348,434 bales of cotton and cotton waste were purchased on the open market for export to Japan; and 2,527 bales were purchased for Austria under the European Cooperation Administration Program. In addition, delivery was made to the Department of the Army of 30,900 bales of cotton which was purchased at the end of the 1947 fiscal year.

Work in connection with the European Cooperation Administration Program included much related to cotton, cotton waste, cotton linters, hemp, and flax fiber. In reviewing the requests of the various claimants and making recommendations, consideration was given to (1) the quantity of each quality available or likely to be available during the year; (2) domestic requirements by qualities; (3) requests by claimant countries in relation to stocks on hand and manufacturing capacity and qualities requested in relation to end use; (4) maintenance of adequate working stocks for domestic use; and (5) the prevailing domestic and foreign prices for these products.

Contracts for purchase of the commodities listed by the participating countries for reasonableness of prices paid, delivery costs, and other costs were reviewed.

Under a price-support program for hemp fiber, a total of 1,440,020 pounds of line fiber was purchased. Purchases were made direct from processing plants in Wisconsin, as has been the practice under previous programs. In January a fire in the storage warehouse damaged stored fiber. The badly damaged fiber was sold. The sales and reprocessing loss due to the fire totaled 188,874 pounds. This left in inventory, as of June 30, 1948, 1,245,796 pounds of hemp line fiber. This fiber will be offered for sale during the 1949 fiscal year.

Loans of \$527,000 were outstanding at the beginning of the 1948 fiscal year on 1,053,585 pounds of flax fiber. On August 22, 1947, all loans outstanding as of that date—1,145,000 pounds—were called. This fiber was sold to domestic consumers. The average loan rate was 49.8 cents per pound, while the average sale price was 33.2 cents, thus making a loss of 16.6 cents per pound.

Loans were made on 1,435,000 pounds of flax fiber between August 22, 1947, and the end of the fiscal year.

## Standardization

## CLASSING

A total of 3,100 boxes—representing the grade standards for cotton, the preparation standards, and standards for cotton linters—were distributed, as compared with 5,138 in 1947. Staple types distributed totaled 9,610, as compared with 9,488 in 1947.

A new development was the inauguration of split-grade designations under the Smith-Doxey Act and the Grade and Staple Statistics Act.

These split-grade designations are not used in substitution for the official grade designations but, where applicable, are added to them as additional explanatory matter. These additional explanatory terms indicate "plus" values somewhat comparable with certain terms used in the trade—and in the merchandising of cotton some of the plus designations have commanded substantial premiums over the straight grades.

Studies were continued to maintain the constancy, representativeness, and reliability of the standards. These studies involved the careful testing of bales considered as a source of material for staple-length types sold to the public; and color measurements, not only of bales of cotton tentatively being considered for use in the actual preparation of the cotton-grade standards, but also analyses of the color of current crop cotton in relation to the official grade standards.

It was recommended that two additional grades of felt be included in the specifications calling for cotton linters of lower grades, in which the mixture of cotton linters would be slightly reduced and cotton lint increased.

## CLASSING

Cotton is classed under the United States Cotton Futures Act, as amended, the United States Cotton Standards Act, the Smith-Doxey Act, and the Cotton Quality Statistics Act. Table 4 summarizes pertinent data on classing work carried on both in the field and in Washington.

The great increase over the previous year in the volume of cotton classed for organized cotton-improvement groups, authorized by the Smith-Doxey Act, was an outstanding feature of PMA's cotton work of the 1947-48 season. The proportion of the crop classed under the Smith-Doxey program has increased from about three-fourths of 1 percent of the crop in the 1938-39 season to more than 37½ percent of the crop in the 1947-48 season.

Organized cotton improvement groups numbered 2,453 and had 346,500 members during the 1947-48 season, as compared with 2,515 groups and 343,700 members during the 1946-47 season.

The Board of Supervising Cotton Examiners, responsible for checking the accuracy and uniformity of work done by Government classers and by licensed classers in private employ, continued to coordinate all classing work. Total classifications of the board numbered 283,080, and total supervision classifications by local supervisors numbered 18,851.

A cooperative arrangement with the U. S. Bureau of the Customs was continued, for the purpose of determining whether imported cotton was 1½ inches or more in staple length and hence subject to duty.

Boards of Licensed Cotton Linters Classifiers, which had been established during the war at Los Angeles, Dallas, Memphis, and Atlanta, were abolished during the year (except the one at Dallas) because the need for them no longer existed.

TABLE 4.—*Volume of cotton classed (not including samples classed for supervision purposes), fiscal years 1946-48*

Cotton classed under or for—	Cotton classed in fiscal year—		
	1946	1947	1948
Cotton Futures Act:	<i>Samples</i>	<i>Samples</i>	<i>Samples</i>
Original certifications.....	62, 094	140, 623	291, 211
Reviews.....	49, 045	85, 302	138, 520
Cotton Standards Act, public classing service and miscellaneous.....	409, 904	209, 807	415, 925
Commodity Credit Corporation loan cotton.....	657, 632	132, 251	160, 668
Government purchase and sales programs.....	1, 188, 203	679, 188	589, 171
Federal Penitentiary, Atlanta, Ga.....	15, 932	16, 691	12, 633
Act of April 13, 1937 (Smith-Doxey Act).....	2, 905, 437	2, 580, 273	<sup>1</sup> 4, 309, 581
Grade and Staple Statistics Act.....	306, 458	382, 570	381, 931
Total classed by employees of Cotton Branch.....	5, 594, 705	4, 226, 705	6, 299, 640
Reported as classed by licensed classers under Cotton Standards Act.....	5, 720, 810	6, 474, 555	<sup>2</sup> 4, 230, 849

<sup>1</sup> Classifications under this act are acceptable as a basis for Commodity Credit Corporation loans.

<sup>2</sup> These figures include ordinary bale-by-bale classifications, samples classed in assembling cotton into even-running lots, and classifications of cotton previously assembled into even-running lots.

Licensed chemists issued almost 127,000 official certificates evidencing the grade of about 3,168,000 tons of cottonseed, as compared with official certifications of about 2,784,000 tons in 1946-47. It is believed that official gradings applied to about 75 percent of the cottonseed available for crushing purposes in the United States during the 1947-48 season.

#### Market Reports

Market news reports, as in past years, were made available to cotton farmers, the cotton trade, and the public generally. Market news for organized groups was issued from Atlanta, Memphis, and Dallas during the harvest season. A weekly cotton market review was issued from Washington, Atlanta, Memphis, Dallas, and Bakersfield. Cottonseed market reviews were issued from Atlanta, Memphis, and Dallas throughout the active marketing season. A weekly cotton linters review was issued from Washington. Monthly compilations of cotton-price statistics, containing analyses and discussions of facts affecting cotton prices, were issued from Washington.

#### New-Use Programs

Under a cotton-for-insulation program, cotton utilization during the fiscal year 1948 totaled approximately 18,000 bales, as compared



with about 46,000 bales the preceding fiscal year. The rate of payment was  $5\frac{3}{4}$  cents per pound of cotton used.

A cotton-for-paper program was approved in January 1948, with the rate of payment established at 2 cents per pound, gross weight of cotton. Although 19 concerns made applications for the use of a total of 18,000 bales of cotton, none had purchased cotton through June 30, 1948—the official deadline for making such purchases. As a consequence no payments will be made under the 1948 program.

A cotton-for-automotive-batts program was concluded in September 1947. The rate of payment was 4 cents per pound, gross weight, of cotton used. Cotton used under this program from its inception in the fiscal year 1946 to its conclusion in the fiscal year 1948 was approximately 43,000 bales.

### Price-Quotation Supervision

The Cotton Futures Act provides for the designation of spot cotton markets for certain purposes. At present 10 markets carry these designations—Memphis, Charleston, Savannah, Augusta, Montgomery, New Orleans, Little Rock, Dallas, Houston, and Galveston. The supervision of quotations in these markets is intended to safeguard the accuracy of the quotations, which are the basis for futures-contract settlements, loan differentials, the market news service, and certain research studies.

Market-quotations committees in Charleston, Savannah, Augusta, Montgomery, Memphis, New Orleans, and Little Rock discontinued quotations for  $1\frac{3}{16}$ -inch cotton because this length of staple is not handled in significant quantities in those markets.

A decision of the committee of the Memphis Cotton Exchange to quote Strict Good Ordinary and Good Ordinary grades of various staple lengths at fixed prices was protested by PMA on the ground that in designated spot markets adjustments must be made promptly to keep differences in line with actual values. As a result, the Memphis committee agreed to meet each market day for appropriate appraisal of local market values as a basis for the issuance of quotations.

### Testing

The Service Testing Act of April 7, 1941, authorizes the Secretary of Agriculture to make fiber and spinning tests to determine the quality of cotton samples submitted for testing by cotton breeders and others. A total of 37,842 tests were made under the act during the year. In addition, 53,909 tests were made in connection with PMA research programs, and 2,625 tests were made for other Federal and State research agencies.

### Research

An expanded program of cotton research was carried on during the year.

One ginning study, confined to the coastal-plain area of North Carolina, showed that, at larger volumes, the actual cost per bale of ginning with standard gins was less than with ginning by substandard gins. PMA recommended that ginners in this area who contemplate the installation of new gins should consider installing a drier, overhead cleaner, and extractor feeders because of the late-season high-moisture content of the cotton—and that ginners give close attention to speed and maintenance of gin saws and to the setting of seed boards.

After harvesting different varieties of cotton with mechanical pickers, researchers found that a smooth-leaved experimental variety contained substantially less foreign matter than several hairy-leaved varieties—an advantage that carried through extensive seed-cotton cleaning operations. Although the experimental cotton is not highly satisfactory from a quality standpoint, the need for developing cotton adapted for mechanical picking is definitely indicated.

The average cost of ginning and packaging upland cotton was \$8.97 per 500-pound gross-weight bale, and \$15.47 for American Egyptian cotton, as compared with costs of \$8.09 and \$14.48, respectively, during the 1946-47 season.

Charges made by public cotton warehouses for receiving, weighing, sampling, tagging, and issuing of warehouse receipts averaged 52 cents per bale; compression charges, 98 cents for standard density and \$1.10 for high density; and storage costs, 30 cents per month.

Results of a survey to ascertain practices and costs involved in the marketing of cottonseed had not been analyzed completely at the end of the fiscal year. Preliminary data indicated that half of the oil mills in the Cotton Belt, representing 75 percent of the total tonnage, purchased cottonseed on the basis of the official grades, and that practically all cottonseed was purchased f. o. b. gin point.

Research carried on under authority of the Research and Marketing cottonseed was continued.

Research carried on under authority of the Research and Marketing Act included studies to ascertain the qualities and types of cotton most suitable for each of the principal end-use products made of cotton, the adaptability of improved varieties of cotton for the manufacture of various end-use products, and the extent of outlets for cotton of each type and quality. PMA collected from 70 cooperating mills samples of raw cotton used and products manufactured. In PMA laboratories the raw cotton used in each instance was processed into the same products as manufactured by the mills as a basis for relating results to the established bench marks of the laboratories. More than 11,000 individual tests of raw cotton and cotton products were made during the year under this program.

## DAIRY PRODUCTS

### Marketing Agreements and Orders

Erratic price movements of certain dairy products brought requests for examination of price-making formulas in a number of markets during the year. A new formula put into use in the New England markets under regulation relates milk prices in index numbers, measuring trends in milk-production costs, consumer buying activity, and the general price level.

Milk orders were issued for Paducah, Ky., and Nashville, Tenn. An order was issued for the Topeka, Kans., marketing area, replacing a marketing agreement. The LaPorte County and St. Joseph County, Ind., orders were merged into one for the South Bend-LaPorte, Ind., marketing area. On June 30, 1948, orders in effect numbered 30. The number of producers, volume of pooled milk, and total value of pooled milk at basic butterfat test for these fluid-milk markets are shown in table 5.

TABLE 5.—*Estimated number of producers, estimated volume of pooled milk, and estimated total value of pooled milk at basic butterfat test, in fluid-milk markets under marketing-agreement programs, July 1, 1947–June 30, 1948*

Market	Basic butterfat test	Estimated number of producers	Estimated annual volume of pooled milk	Estimated value of pooled milk at basic test
	Per-cent	Num-ber	1,000 pounds	
Boston, Mass. (201–210-mile zone)---	3.7	13,022	1,253,427	\$63,260,414
Chicago, Ill. (70-mile zone)-----	3.5	19,079	2,886,718	127,380,443
Cincinnati, Ohio-----	4.0	5,108	313,034	14,956,591
Cleveland, Ohio-----	3.5	7,842	568,098	27,152,793
Clinton, Iowa-----	3.5	147	14,253	651,178
Columbus, Ohio-----	3.5	2,322	181,051	8,673,701
Dayton-Springfield, Ohio-----	3.5	2,773	197,986	9,360,522
Dubuque, Iowa-----	3.5	203	25,620	1,074,773
Duluth-Superior, Minn.-Wis-----	4.0	1,240	80,680	3,922,231
Fall River, Mass-----	3.7	234	29,356	1,792,696
Fort Wayne, Ind-----	4.0	913	64,940	3,198,678
Kansas City, Kans.-Mo-----	3.8	2,279	223,129	10,596,872
Louisville, Ky-----	3.8	1,731	194,477	9,551,501
Lowell-Lawrence, Mass-----	3.7	910	82,717	4,703,788
Minneapolis-St. Paul, Minn-----	3.5	5,477	605,581	26,574,023
Nashville, Tenn. <sup>4</sup> -----	4.0	617	49,722	2,815,442
New Orleans, La. (61–70-mile zone)---	4.0	2,253	168,739	9,137,171
New York, N. Y. (201–210-mile zone)---	3.5	45,270	5,497,617	264,197,247
Omaha-Council Bluffs, Nebr.-Iowa-----	3.8	2,391	131,198	6,297,000
Paducah, Ky. <sup>5</sup> -----	4.0	178	6,658	351,540
Philadelphia, Pa-----	4.0	9,035	965,573	51,568,324
Quad Cities, Ill.-Iowa <sup>6</sup> -----	3.5	1,308	49,397	2,038,683
Grade A-----	3.5	442	28,798	1,383,839
Nongrade A-----	3.5	856	25,691	1,045,900
St. Louis, Mo-----	3.5	3,294	338,552	16,558,595
Sioux City, Iowa-----	3.5	494	30,632	1,417,507
South Bend-La Porte, Ind. <sup>7</sup> -----	3.5	775	76,513	3,396,871
Suburban Chicago, Ill. (70-mile zone):				
Grade A-----	3.5	626	86,289	3,915,556
Grade B-----	3.5	2,160	173,819	7,566,895
Toledo, Ohio-----	3.5	2,050	142,613	6,776,084
Topeka, Kans. <sup>8</sup> -----	3.8	316	29,618	1,391,074
Tri-State (Kentucky, Ohio, and West Virginia):				
Huntington district plants-----	3.5	1,608	48,111	2,430,809
Other than Huntington district plants-----	3.5	1,747	57,867	2,828,967
Wichita, Kans-----	3.8	504	51,966	2,597,170
Total-----		137,204	14,680,440	700,564,878

<sup>1</sup> 10-month average.

<sup>2</sup> 11-month total.

<sup>3</sup> Changed from 4.0 to 3.8 percent effective Oct. 1.

<sup>4</sup> Order effective Nov. 16; pricing provisions effective Dec. 1.

<sup>5</sup> Order effective Jan. 1.

<sup>6</sup> Order was amended to determine two separate uniform prices.

<sup>7</sup> La Porte County, Ind., order merged with St. Joseph County, Ind., order effective Dec. 1, now known as South Bend-La Porte, Ind.

<sup>8</sup> Order effective Jan. 1 to supersede agreement.

Compiled by the Dairy Branch, PMA, from reports of the market administrators.



Seventy-one hearings were held to receive testimony on new orders or proposed amendments. Thirty-five amendments and twenty-one suspension orders to change existing order provisions were issued.

New or renewed requests were received for fluid-milk regulation in six cities and for a Nation-wide evaporated milk order. Requests received in preceding years for programs in 10 other new areas were also pending.

Seven public meetings held pursuant to the terms of the Administrative Procedure Act resulted in seven actions by various market administrators.

Forty-one new applications from cooperatives for qualifications to participate in order activities or suspensions by the market administrator of cooperatives previously determined to be qualified were considered. Determinations were issued on 36 of these cases and action on 23 was pending as the year ended.

Twenty-two petitions were received for review of order provisions, or of market-administrator rules issued pursuant to orders. Decisions or dismissals were issued for 62 petitions arising during the year or in former years. At the year's end, 26 cases were pending.

Twenty-three court cases were begun, eighteen were concluded, and fifteen cases were left pending.

#### School Lunch Activities

More than 7,000,000 pounds of nonfat dry milk and 6,000,000 pounds of processed Cheddar cheese were purchased and distributed for use in the school-lunch program under section 6 of the National School Lunch Act, (See table 6.) The nonfat dry milk was used in preparing cooked foods for the lunches in areas where adequate supplies of fluid milk were not available. It also was reconstituted and served as a beverage, furnishing needed milk nutrients to the children's diets. The cheese aided in meeting the protein needs in the lunches.

TABLE 6.—*Dairy products purchased by the U. S. Department of Agriculture, fiscal year ended June 30, 1948*<sup>1</sup>

Program and product	Quantity	Purchase cost
School lunch:		
Processed Cheddar cheese ----- pounds..	6, 412, 500	\$2, 814, 065
Nonfat dry milk ----- do .....	7, 358, 000	1, 170, 741
Price support: Nonfat dry milk ----- do .....	47, 205, 442	4, 540, 905
General supply program:		
Nonfat dry milk ----- do .....	40, 804, 690	5, 744, 837
Evaporated milk ----- cases .....	2, 441, 775	12, 993, 989
Sweetened condensed milk ----- do .....	80, 000	660, 391
Dry whole milk ----- pounds..	14, 248, 014	6, 134, 916

<sup>1</sup> Quantities and costs shown are based on contract records of PMA's Dairy Branch rather than on accounting records of the CCC.

#### Dairy Price-Support Programs

When dairy prices declined sharply in the spring of 1947, preparations were made for price supports to assure returns to producers

for milk and butterfat of at least 90 percent of parity. Price-support purchasing of nonfat dry milk solids begun in March 1947, was continued through August. From manufacturers and handlers, the Commodity Credit Corporation bought spray at 10 cents a pound and roller nonfat dry milk solids at 9 cents. Prices increased and no further support was necessary.

All the nonfat dry milk solids acquired under the price-support program was sold at no loss by CCC to the Department of the Army, the United Nations International Children's Emergency Fund, the State Department, and other agencies for export to liberated areas and to foreign aid and relief programs.

#### Agricultural-Supply Programs

CCC continued to buy dairy products for the United Nations International Children's Emergency Fund and for United States-financed foreign relief, aid, and assistance to France, Austria, Greece, Italy, and Trieste. Evaporated milk, sweetened condensed milk, dry whole milk, and nonfat dry milk solids that was purchased specifically for these purposes totaled 82,000 tons. This was in addition to the price-support nonfat dry milk solids supplied for such programs.

#### Foreign-Assistance Analysis

European requirements for dairy products were analyzed and background data were developed for inclusion in foreign-assistance programs which were being considered by Congress.

#### Market News Service

New offices were established at Cleveland, Ohio; St. Louis, Mo.; and Madison, Wis. Amendment of the Ohio cooperative market news agreement added Columbus as a Federal-State office. At the end of the year, dairy and poultry market reports were being issued from 28 offices.

A full-time dressed-poultry market reporter was added to the New York staff. At Atlanta, reporting was extended to dressed poultry and to local wholesale prices of cream used primarily for ice cream. The Chicago office added turkeys to its poultry list, which covers receipts at some 225 primary markets in 17 Midwestern States. Arrangements were completed for weekly reports on carlots of eggs and butter moving into the Pacific coast area from the Midwest. Radio and press outlets were expanded. The Associated Press and United Press at New York are supplied with condensed market reports which in turn reach more than 100 radio stations in New York and New England. The teletype system was extended to New Orleans. A new cooperative agreement with the Maryland Department of Agriculture providing for increased State participation has been prepared. The Madison, Wis., office is now preparing special reports on monthly averaged prices for certain milk condenseries listed in the Chicago milk order, and similar reports on cheese prices at the Wisconsin Cheese Exchange.

The report covering the Washington, D. C., market was discontinued because funds were lacking.

### Inspection and Grading

Federal grading of butter on the New York terminal market was considerably expanded, the result largely of an amendment of the New York Mercantile Exchange rules to provide for accepting Federal certificates as a basis for trading. Practically all sales of butter over the exchange are now covered by Federal certificates. A considerable volume of eggs was also being graded for exchange sales.

The volume of dairy products graded for delivery on Government contracts, especially nonfat dry-milk solids and processed cheese, was less than during the preceding year. Several buyers for foreign governments continued to use the USDA inspection service as a basis for purchasing dry milk, cheese, and evaporated and sweetened condensed milk.

Revised instructions were issued to graders and inspectors, outlining procedures and techniques to be employed in grading and inspecting eggs in various forms.

Numerous firms applied for the privilege of identifying consumer packages of shell eggs with the Federal grade during the year, and several firms began to label officially graded New York dressed broilers and fryers with U. S. grades.

Turkey- and egg-grading schools were conducted in many States in order to train graders and packers of officially graded poultry and eggs.

Revisions of the instructions for the postmortem inspection of rabbits and the recommendations as to equipment and plant facilities for inspected rabbits were prepared.

The quantities of dairy and poultry products inspected or graded in 1947 and 1948 are shown in table 7.

TABLE 7.—*Comparative statement of inspections and/or gradings on dairy and poultry products during fiscal years 1947 and 1948*

Commodity	Inspections in—	
	Fiscal year 1947	Fiscal year 1948
	<i>1,000 units</i>	<i>1,000 units</i>
Butter.....pounds..	166, 872	238, 064
Cheese.....do.....	160, 400	117, 825
Eggs.....cases.....	12, 634	13, 618
Poultry (shipping point and terminal market)		
.....pounds..	154, 039	162, 500
Dressed poultry (inspected for condition and wholesomeness).....pounds..	228, 408	252, 576
Live poultry.....do.....	1, 267	1, 975
Dressed turkeys.....do.....	92, 815	101, 500
Frozen eggs.....do.....	92, 588	50, 500
Dry milk.....do.....	353, 846	215, 050
Evaporated milk.....cases.....	8, 165	5, 024
Dried eggs.....pounds..	126, 694	36, 500
Processed eggs.....do.....	676, 662	295, 287

### Standardization

Plans were made for comprehensive studies of the various factors affecting the quality of milk and its products, and of the measures



and controls of quality. Specifications for dairy products purchased by CCC for various purposes were reviewed and revised.

Cream quality-improvement programs, started as part of a voluntary wartime conservation program, were continued in a number of States. They involved the grading of cream, the paying of differential prices for cream of different quality, and the coordination of cream deliveries from farms to stations to processing plants. These voluntary programs were operated by local dairy organizations, in co-operation with State agencies, with PMA approval, pursuant to a Department of Justice policy that voluntary participation by the dairy industry would not be considered a violation of the antitrust laws.

## FATS AND OILS

### Price-Support Programs

Price-support programs were in effect for flaxseed, peanuts, soybeans, and tung oil produced from the 1947 crop.

#### FLAXSEED

Flaxseed is a so-called Steagall commodity which the United States Department of Agriculture is required to support at not less than 90 percent of the parity price. The 1947 crop was supported by means of producer loans and purchase agreements at \$6 per bushel, Minneapolis basis, U. S. No. 1 grade, with price differentials for other base points. No. 2 flaxseed was supported at 5 cents per bushel less than the price for No. 1 flaxseed. The support price was considerably above the minimum requirements of the Steagall amendment to the Stabilization Act and was approved at that high level to assure fulfillment of the linseed oil requirements of this country. It was considered advisable to make the United States independent of other countries (except Canada and Mexico) for our linseed-oil requirements.

Loan rates were established for each flax-producing county. This was done by subtracting from the base-point price most beneficial to the producer the cost of freight (including tax) and 8 cents to cover country handling and terminal charges.

Approximately 527,000 bushels of flaxseed were placed under loan. Of this total, about 377,000 bushels were redeemed, about 97,000 bushels were delivered to the CCC in repayment of loans, and about 53,000 remained outstanding as collateral. Only a small quantity of flax was bought by CCC from producers under the purchase-agreement program. The number of loans and purchases was relatively small because the market level remained at or above the support level.

One reason that there were so few loans and purchases was the operation of the processor-contract provisions of the 1947 program. Under these provisions CCC made a processor agreement with nearly all linseed-oil producers. CCC agreed to purchase linseed oil from processors who agreed to pay growers not less than support prices for flaxseed. Approximately 6,374,000 pounds of linseed oil from the 1947 crop were acquired, and all of it was sold at no loss to the Corporation.

A program has been announced to support the 1948 flaxseed crop at \$6 per bushel, Minneapolis basis, U. S. No. 1 grade, the same price

as the 1947 support level. The new program provides for loans to producers, purchases from producers under purchase agreements, direct purchases from processors and others, and contracts with processors who agree to pay growers not less than support prices.

Acquisition of linseed oil under the 1948 program began in May. By the end of the fiscal year, approximately 2,000,000 pounds had been acquired. All of this oil has been sold for export without loss to the Corporation and has been shipped or was scheduled for shipment under the European recovery program.

#### PEANUTS

As required by law, the price of the 1947 crop of peanuts was supported at 90 percent of parity as of July 1, 1947. Base-grade support prices for different varieties and areas were established as follows:

- (1) Virginia----- 65 percent sound mature kernels, \$196 per ton.
- (2) Runner----- 65 percent sound mature kernels, \$185 per ton.
- (3) Spanish and Valencia--- West of Mississippi River, 70 percent sound mature kernels, \$201 per ton.
- (4) Spanish and Valencia--- East of Mississippi River, 70 percent sound mature kernels, \$203 per ton.

Premiums and discounts were applicable to other grades.

Under the price-support program for the 1947 crop, provisions were made for loans to producers and loans to dealers, as well as purchases by CCC. Producer loans were available at the applicable support level, but no loans were made for the 1947 crop. Loans to peanut processors under lending-agency agreements amounted to \$37,417,685 for the 1947 program. Interest payments accruing to CCC from the loans to processors amounted to \$175,000. Through June 30, 1948, the Corporation purchased about 217,000 tons of 1947-crop peanuts. Of this total, 142,000 tons were farmers' stock peanuts and 75,000 tons were No. 2 shelled peanuts.

Of the 142,000 tons of farmers' stock peanuts acquired by the Corporation, only 1,400 tons remained in inventory as of June 30, 1948. (All of these were sold during July 1948.) The farmers' stock peanuts acquired by the Corporation from the 1947 crop were disposed of by selling 87,000 tons for domestic crushing and by shelling and exporting 55,000 tons.

Of the 75,000 tons of No. 2 shelled peanuts purchased by the Corporation, 21,000 tons were sold for crushing in the United States. The remaining 54,000 tons were exported. Exports consisted of 39,000 tons obtained from shelling 55,000 tons of farmers' stock peanuts and 54,000 tons of No. 2 shelled peanuts. Total exports—93,000 tons—were distributed as follows:

	<i>Tons</i>
To Austria-----	17,000
To Bizonia-----	65,000
To France-----	11,000

A price-support program for the 1948 crop of peanuts, similar to that in operation for the 1947 crop, has been announced. Since producers had approved marketing quotas for 1948 and the quotas were suspended by the Secretary of Agriculture, the entire 1948 crop will be supported at 90 percent of parity as of July 15, 1948.

## SOYBEANS

As a so-called Steagall commodity, the 1947 soybean crop was required to be supported by CCC at not less than 90 percent of the comparable price. The support level was \$2.04 per net bushel of eligible class I (yellow) and class II (green) containing 14 percent moisture and grading No. 2 or better. The basic support price for brown, black, and mixed soybeans was \$1.84. Premiums were provided for low moisture, and discounts were made for mixtures and for other quality factors specified in the U. S. standard grades.

The support program for the 1947 soybean crop provided for: (1) Loans to producers for soybeans stored on farms in approved storage facilities; (2) purchases from producers, through county PMA offices, when adequate markets were not otherwise available; and (3) lending-agency agreements with private lending agencies and processors under which processors agreed to pay not less than support prices for all 1947-crop soybeans and the Corporation agreed to take over loans made to processors if requested to do so by the lending agency.

Because of the strong demand for soybeans, only 6,069 bushels were placed under loan. Redemptions left 948 bushels under loan at the end of the fiscal year. Because commercial market prices during the year so greatly exceeded the support level, county offices purchased no soybeans. In addition, the lending-agency agreements offered financing to all processors. Under the lending-agency agreements, processors financed the handling of 3,527,663 bushels, involving \$7,228,038.

The amount outstanding under all phases of the program at the end of the fiscal year was approximately \$800,000. Approximately \$35,000 in interest was paid to the Corporation under the lending-agency-agreement program.

For the 1948 soybean crop there will be a support price of 90 percent of the comparable price as of August 15, 1948.

## TUNG OIL

A program was established to support the price of tung oil at 25 cents per pound, f. o. b. mill. Contracts were made with six processors who agreed to pay producers not less than \$72 per ton, based on 20-percent oil content for tung nuts. In addition, producers of tung nuts crushed on a toll basis could sell their tung oil to CCC at 25 cents per pound, f. o. b. processing plant. Purchases by the CCC during the fiscal year totaled 7,087,735 pounds. Sales of 326,900 pounds left 6,760,835 pounds on hand at the end of the year.

## Purchases in Foreign Countries

On April 1, 1948, the Department of Agriculture announced the recommendation of the Procurement Planning Subcommittee on purchase responsibility for the foods to be procured by Government agencies, for Foreign Relief Supply programs. This was a division of responsibility between the Department of the Army and the Department of Agriculture, with 7 items for Army procurement and 11 for the Department of Agriculture. Besides these products, PMA during



the entire year was also responsible for the purchase of vegetable and seed oils, flaxseed, and peanuts and related processed commodities.

Foreign purchases for supply programs during the year included 7,533,118 pounds of wet salted fish in Iceland for shipment to Greece and Italy under the United States foreign relief program; 27,023,022 pounds of copra from the Philippines for France under the European recovery program; and 1,407,607 pounds of coconut oil.

Development of programs to aid non-European countries to increase production of fats and oils, authorized in the Stabilization (anti-inflation) Act of 1947, Joint Resolution 167, was given a start in a proposed agreement with the Netherlands Indies Government under which CCC will make available not more than \$25,000,000 to promote the production of copra and palm oil. At the end of the fiscal year, the agreement was ready to be signed by the Netherlands Indies Government and CCC.

### Agricultural-Supply Programs

#### PURCHASES

Domestic procurement increased considerably over previous years. Purchases for the United States foreign relief, United States foreign air, and international children's emergency fund programs decreased and generally were being returned to private trade. Activity under the European recovery program, administered by the Economic Cooperation Administration, which began operations late in the year, was increasing rapidly as the year closed.

#### War Food Order 63

During the year Congress authorized several extensions of PMA's authority to administer import controls under War Food Order 63. Under the latest extension, for the period ending June 30, 1949, authority to control imports is limited to fats and oils (including oil-bearing materials, fatty acids, butter, soap, and soap powder, but excluding petroleum and petroleum products) and rice and rice products.

A major accomplishment in the administration of War Food Order 63 was the implementation of allocations of the International Emergency Food Committee for importations into the United States. Compliance with the provisions of the import license was accomplished by integration of the work of several Government agencies. The consular service issued, or refused to issue, consular invoices whereby merchandise controlled under the order could or could not be exported from the country of origin to or through the United States. Both the Bureau of Customs and the Food and Drug Administration worked to detect violations. Reports of the importations received, from the Bureau of Customs, provided an effective means of detecting violations of the order or of the provisions of restrictions in the licenses. The Department's food-testing laboratories and its Office of the Solicitor cooperated in enforcement of the order.

During the year seven amendments were issued to WFO 63. The more important amendments resulted in the removal from import control of sugar, molasses, castor beans and castor oil, and the placing of olive oil under import control. The number of general types of

commodities under import control had decreased from 176 in July 1945 to 49 on June 30, 1948.

The number of formal actions taken was 5,816, a slight decrease from the number taken in the preceding year. The number of petitions, hardship cases, and public announcements remained about the same.

## FRUITS AND VEGETABLES

### Price Support and Surplus Removal

During the year the fruit and vegetable industry was faced with the recurrence of peacetime problems of lower prices and heavy supplies in many commodities—a situation aggravated by a loss of export markets, principally for fresh apples, fresh pears, and dried fruits. Growers had difficulties in marketing the potato crop, and price-support operations were necessary.

PMA conducted price-support, surplus removal, diversion, or procurement activities for the following commodities: Potatoes, sweet potatoes, canned grapefruit juice, canned orange juice, canned apple-sauce, canned sliced apples, canned purple plums, fresh pears, fresh cabbage, topped beets, fresh snap beans, dried apples, dried apricots, dried figs, dried peaches, dried prunes, raisins, dates, filberts, walnuts, and honey.

Purchases of surplus potatoes during the year cost about \$67,000,000 and ran to about 25,000,000 hundredweight, of which about 20,000,000 hundredweight came from the 1947 crop and 4,700,000 hundredweight came from the 1948 crop. Except for minor losses in storage or in transit, all these potatoes were diverted to useful outlets.

The 384,000,000-bushel 1947 crop was only 9,000,000 bushels greater than the 375,000,000-bushel crop that it was thought could be marketed domestically at prices which would reflect to growers at least 90 percent of parity. But in 1947, to a greater extent than normal, production from some of the early-crop potato States overlapped with that from other areas. In addition, late-crop production in the western part of the country was noticeably less than normal, in the central part it was approximately equal to estimated requirements, and in the eastern part it was very much greater than normal needs. As a result, there was a surplus problem, even though western areas could have used more potatoes.

Because of these conditions, extensive purchase, loan, and diversion operations became necessary. Potatoes of the 1947 crop were acquired in 41 States—led by Maine, New Jersey, New York, Virginia, and Minnesota. Total cost was \$61,777,900. However, recoveries for potatoes exported under the Foreign Aid Act of 1947 and for potatoes used for flour, dehydration, starch, alcohol, livestock, feed, and other products amounted to \$22,249,300, thus reducing the cost to PMA to a net of \$39,528,600 for the 1947 crop.

Price-support operations also became necessary for the 1948 crop, and heavy purchases were made in Virginia, North Carolina, and California. By July 24, 1948, the Government had acquired 7,138,700 hundredweight of this crop at a commodity cost of \$17,843,500. These potatoes were utilized principally for alcohol, livestock feed, and potato flour.

For the first time since sweetpotatoes were made a "Steagall" commodity, it became necessary to purchase fairly large quantities in order to prevent prices from dropping below the support level. Purchases of 594,645 bushels of 1947-crop sweetpotatoes were made in Virginia, Maryland, and North Carolina at a commodity cost of \$897,102.

In addition to potatoes and sweetpotatoes, the price-support, surplus-removal, diversion, and procurement purchases of fruits, vegetables, tree nuts, and honey totaled \$61,807,186.

### Regulation

#### MARKETING AGREEMENT PROGRAMS

As prices for most fruits, vegetables, and edible tree nuts declined below their wartime peaks, there was a renewed interest in marketing agreements and orders. Twenty programs were in effect during the year, covering thirteen different fruits, vegetables, and edible tree nuts marketed from sixteen States. Eleven programs were in active operation; three were amended during the year; and public hearings were held in connection with proposed amendments to seven existing programs. Public hearings also were held in connection with proposals for five new programs.

Regulatory orders were prepared and approved after administrative committees had made recommendations affecting California Bartlett pears, plums, and Elberta peaches, California Tokay grapes, Georgia peaches, California-Arizona oranges, lemons, and desert grapefruit, Florida oranges, grapefruit, and tangerines, Colorado fresh peas and cauliflower, North Carolina-Virginia potatoes, and Michigan-Wisconsin-Minnesota-North Dakota potatoes.

During the 1947 season the usual regulatory orders were issued limiting shipment of the different varieties of peaches grown in Georgia by grades and sizes. Because the yield of merchantable peaches was much smaller than had been anticipated earlier in the season, the assessment rate was increased, effective July 18, 1947, from 8 mills to 1 cent per bushel basket of peaches shipped in interstate commerce. Proposed amendments to the marketing agreement and order failed to pass in a referendum held May 10 to 17, 1948. The 1948 Georgia peach crop was severely damaged by unfavorable weather conditions and was only about half as large as the 1947 crop. No grade or size regulations were recommended by the industry committee for the 1948 season, but the maturity and inspection requirements which are included in the marketing agreement and order were in effect.

Under the California Bartlett pear, plum, and Elberta peach agreement and order, there were issued during the 1947 marketing season 23 plum regulatory orders and 7 amendments, 1 Bartlett pear regulatory order and 1 amendment, and 1 Elberta peach regulatory order. As the year ended, public hearings had been held and a referendum scheduled to determine whether producers of these fruits grown in California favor the issuance of four amendments to the marketing agreement and order.

Also during the 1947 season a regulatory order was issued limiting shipments of California Tokay grapes to those meeting certain grade and size requirements. During the year, a public hearing on four



proposed amendments was held. The recommended decision of the Assistant Administrator with respect to these proposals was pending at the end of the year.

Regulations of shipments of oranges from California and Arizona were in effect during each week of the year. Eleven proposed changes to this marketing order were under consideration at the end of the year, public hearings having been held.

Fifty-two regulations were in effect during the fiscal year under the California-Arizona lemon marketing agreement and order. Recommended amendments to the program provided different regulations for lemons grown in Arizona and the desert areas of California, on the one hand, and the intrastate marketings of lemons in Arizona and California, on the other. After a referendum, the Secretary of Agriculture issued the amended order and entered into the marketing agreement, effective March 23, 1948.

During the year 11 regulations of the grades and sizes of desert grapefruit to be shipped in interstate commerce were issued during the period from October 12, 1947, through the end of the fiscal year.

At various times between September 29, 1947, and the end of the fiscal year, 24 orange regulations, 12 grapefruit regulations, and 9 tangerine regulations were issued under the Florida citrus marketing agreement and order. After a public hearing and a referendum on proposed amendments to the Florida program providing for regulations containing different grade and size limitations for the Indian River section, the Secretary of Agriculture entered into an amended marketing agreement and order effective December 15, 1947.

Under the Colorado pea and cauliflower agreement and order, grade and size regulations were in effect during the 1947 shipping season, when the State of Colorado shipped 769 carloads of fresh peas and 1,146 carloads of cauliflower, most of which were covered by the Colorado pea and cauliflower marketing agreement and order.

Two marketing agreement and order programs for potatoes were in operation during the year. The agreement and order regulating the handling of late-crop potatoes grown in Michigan, Wisconsin, Minnesota, and North Dakota was made operative at the beginning of the 1947 crop season. A new program regulating the marketing of potatoes grown in North Carolina and Virginia was promulgated in May 1948 and made applicable to the marketing of the 1948 crop. Another new marketing agreement and order program to regulate the handling of South Dakota potatoes was promulgated in May 1948, but the program did not apply to the 1947 crop, since marketings had been virtually completed.

A hearing was held at Presque Isle, Maine, on April 26, 1948, on a proposed marketing agreement program to regulate the marketing of potatoes produced in Maine. Work was proceeding on this proposal at the close of the fiscal year.

A marketing agreement and order program for walnuts produced in California, Oregon, and Washington was in operation during the 1947 crop season. At the beginning of the 1947 crop year, the agreement and order were revised and simplified to facilitate operations under the requirements of the Administrative Procedure Act. During the fiscal year, a proposal was made for termination of the existing walnut

marketing agreement and order program and its replacement by an entirely new order and agreement. Hearings were held in April 1948 on such a new marketing agreement and order and the recommended decision of the Assistant Administrator, based on the records of the hearings, was issued in June 1948.

Nearly all the evidence introduced at a public hearing on a proposed marketing agreement and order for fresh peaches grown in North Carolina and South Carolina was favorable toward adoption of a program. However, at a referendum held May 12 to 18 the program was not approved. The unfavorable voting outcome was ascribed largely to the producers' wish to avoid regulation on shipments in a season of short supply, the prospective production of peaches in the two States being less than half a normal crop.

Growers and handlers of Emperor grapes in California petitioned for a hearing on a proposed marketing agreement and order. As the year closed, the hearing had been held and briefs had been filed.

Hearings were held on a proposed program to regulate the marketing of Nebraska-Wyoming potatoes, but because the evidence presented at the hearing did not justify entering into such an agreement or the issuance of the proposed order, the program was dropped.

Three additional marketing agreement and order programs—for Oregon-California potatoes, for Idaho-Oregon potatoes, and for Colorado potatoes—were not operative in 1947-48, but the orders applicable to Idaho-Oregon and Oregon-California potatoes were reactivated with the possibility of making them applicable to the marketing of potatoes during the 1948 season.

A hearing was held in April 1948 on a proposal to provide for regulation of the marketing of various grades and sizes of dates produced in California. Tentative proposals for marketing-agreement programs would affect raisins produced in California; dessert wine produced by California wineries; hops produced in California, Oregon, and Washington; and dried prunes and figs produced in California.

PERISHABLE AGRICULTURAL COMMODITY ACT, PRODUCE AGENCY ACT, STANDARD CONTAINER ACTS, AND EXPORT APPLE AND PEAR ACT

Again this year there was increased activity in the administration of the Perishable Agricultural Commodities Act, which is intended to prevent unfair and fraudulent practices in connection with the marketing of perishable farm products in interstate and foreign commerce. As the year closed, 24,733 licenses were in effect, an increase of 1,138 over the preceding year. License fees, arrearages, and penalties received and deposited totaled \$266,474, or \$11,372 more than during the preceding year. Complaints of violations totaled 2,450, an increase of 183, and payments in connection with informal amicable settlements of controversies totaled \$949,947, exceeding those of the preceding year by \$45,815.

Under the Produce Agency Act—which now is used principally to handle complaints that do not come within the scope of the Perishable Agricultural Commodities Act—23 complaints were handled, 2 more than during the preceding year.

Practically no enforcement work under the Export Apple and Pear Act was required during the year.

In the administration of the Standard Container Acts of 1916 and 1928, 200 different types of containers (1,158 samples) were examined at the Washington laboratory and in the field, of which 52 required corrections. The corrections were made in 41 of the cases. Nineteen specifications were approved as required by the 1928 law, an increase of sixteen over the number in the preceding year.

### Market News

The market news service for fruits and vegetables operated 21 permanent market offices and 37 seasonal-shipping-point offices to report volume of movement, distribution, and prices. Cooperative agreements were maintained with 26 States and the Territory of Hawaii. State assistance made it possible to provide a greater service than could have been furnished by the Department alone. Several new agreements or revisions in existing agreements were made during the year. Under one, for example, the work of the Los Angeles office was expanded to provide for issuance of complete citrus reports directed toward the specific requirements of the California citrus industry. In Illinois, under another agreement, the State paid the entire cost of operation of the Anna and Centralia peach offices, and in Texas the State paid \$7,500 toward the cost of seasonal field offices.

A total of 9,753,000 copies of market reports—an increase of about 473,000 above that in the preceding year—were mailed to more than 65,000 persons and firms. Market information provided by the service was carried by 44 metropolitan daily newspapers with a combined circulation of some 12½ million. It is estimated that more than 450 radio stations broadcast fruit and vegetable market news.

A daily report covering the shipment of the more than 964,000 carloads of fruits and vegetables that moved by rail and boat during 1947 was prepared in Washington during the fiscal year. Unloads of major selected fruits and vegetables in 100 United States cities and 5 Canadian cities were released currently each month through market news shipping-area field offices. These shipment and unload data were summarized on a calendar year basis by the Washington office.

Weekly peanut and semimonthly honey reports were issued from the Washington office.

### Standardization and Inspection

Considerable progress was made in the development of new and revised standards for fresh fruits and vegetables. U. S. standards for sweet peppers for processing were issued for the first time. U. S. standards for plums and prunes, for cauliflower, and for citrus fruits were revised. U. S. standards for sweetpotatoes and tangerines were published, and those for filberts in the shell were formulated and published. The first U. S. consumer standards for vegetables were issued—for potatoes and for spinach leaves, those for tomatoes being ready for publication at the end of the fiscal year.

As the year opened, 67 U. S. standards were in effect for canned fruits and vegetables. During the year new U. S. standards were issued for fruit jelly and for olive oil. There were revisions during the year for the standards on canned dried beans, green and wax beans, beets, and cucumber pickles. Proposals published but not yet effective



at the year's end were for U. S. standards on fruit preserves and on canned potatoes.

To the nine U. S. standards for dried fruits and vegetables that were in effect as the year opened were added U. S. standards for dates.

There were 20 U. S. standards for frozen fruits and vegetables when the year opened. U. S. standards were issued on frozen grapefruit, and three standards were revised or amended—on frozen spinach, strawberries, and raspberries.

PMA continued its work with the technical committee of the Federal Specifications Board to develop and revise Federal specifications for fruits and vegetables, and insofar as possible, bringing them into line with the requirements of the U. S. standards. The first specifications for frozen fruits and vegetables were developed during the year.

There was an increased demand for inspection of fresh fruits and vegetables. The volume inspected by PMA and cooperating agencies reached an all-time high of about 991,000 carlot equivalents. This was an increase of about 20,000 carlot equivalents over the number for the preceding year. The total includes about 870,000 carlot equivalents inspected at shipping point and 121,000 carlot equivalents inspected at receiving markets. Inspections for commercial firms in receiving markets were approximately 49,000 carlot equivalents, an increase of about 2,500 over the number for the preceding year, whereas inspections of supplies for public and private agencies were about 72,000, an increase of about 38,000.

Total inspections of canned fruits and vegetables increased 11 percent over those in the preceding year, of frozen fruits and vegetables 1.3 percent, and of dried fruits and dehydrated vegetables 543.5 percent. Continuous inspection of canned fruits and vegetables increased about 1 percent, whereas continuous inspection of frozen fruits and vegetables decreased 11.5 percent.

**(The following research was carried on under authority of the Research and Marketing Act:)**

A publication was prepared summarizing the results of research by other agencies upon the utilization of cull and low-grade potatoes for livestock feed. Several conferences were held with State extension and other workers in the Southeastern and Southwestern States to acquaint them with the results of feeding potatoes to livestock and to lay plans for encouraging a wider use of cull and low-grade potatoes for feed.

PMA worked with canners and growers in Louisiana to ascertain and demonstrate ways in which canners and growers can improve the quality of canned sweetpotatoes. Often the product was graded at the plant, and the factors involved in determining the quality were pointed out and the means of improvement were discussed. In addition, samples of canned sweetpotatoes were obtained from trade channels in various sections of the country and accumulated for cutting before a group of Mississippi and Louisiana canners.

Research into the problems of marketing west Texas potatoes disclosed five principal marketing difficulties confronting producers in this area: (1) The lack of keeping quality of west Texas potatoes, due partly at least to the practice of digging immediately after irrigation; (2) potatoes from west Texas, according to buyers' comments, often just barely meet grade requirements; (3) long potatoes grown in this

area often are misshapen and because of this condition are not favorably accepted by the trade; (4) west Texas potatoes often have more scab than buyers are willing to tolerate; and (5) the competitive position of west Texas potatoes in terminal markets is endangered by the fact that the delivered prices, calculated at support prices plus freight charges, are higher than the delivered prices of potatoes from competing areas.

On the basis of data developed during the year, the grades for frozen raspberries and frozen strawberries have been revised and grades for manufacturing purposes incorporated; research has been completed in the principal areas processing canned and frozen asparagus with respect to an objective method for determining tenderness and texture, presence of grit and sand, and data on other quality requirements; additional data were developed to revise grades for cucumber pickles, fruit jams, and preserves, canned dried beans, canned beets, canned spinach, and frozen spinach and to issue new grades for fruit jelly, olive oil, frozen grapefruit, frozen pineapple, and canned potatoes.

Some additional data for revising the grades for frozen broccoli were obtained and discussed with the industry; however, they were not considered adequate for revising the standards.

Work on the development of a device to mix and divide peanut samples for inspection purposes progressed favorably. A new mixer and divider was designed and built along lines to give a high degree of blending and a highly uniform dividing of the sample and at the same time avoid appreciable breakage of the peanut kernels. Comparisons of the results obtained by mixing and dividing samples with this new device, the Boerner seed-sample divider, and with hand mixing and dividing have been made on a large scale. These comparisons show that the newly designed mixer and divider does a more satisfactory job with shelled peanuts than the other methods.

A contract was made between the Department and the United Fresh Fruit and Vegetable Association under which that association began conducting a series of training classes for retailers in the methods of handling and merchandising fresh fruits and vegetables. The subject matter and the method of instruction was developed in cooperation with the Department. Up to the end of the fiscal year, a total of 465 classes had been held, attended by 4,308 retailers and their employees.

## GRAIN, PULSES, FEEDS, AND SEEDS

### Price Support

Price-support programs were formulated, issued, and administered for wheat, corn, oats, barley, grain sorghums, rice, dry edible peas and beans, alfalfa seed, and a number of winter cover-crop seeds. Although active participation by farmers in these programs was not so heavy as in other years, announcement of the programs gave farmers assurance of fair returns on the crops that they were producing in abundance to meet record export and domestic requirements.

Both loans and purchase agreements were offered to producers on 1947-crop wheat grading U. S. No. 3 or better, or U. S. No. 4 or No. 5 on the basis of test weight only. Loan rates were computed at 90 per-

cent of parity as of the beginning of the marketing year (July 1, 1947). Loans were available from the time of harvest through December 31, 1947, and matured on April 30, 1948. Purchase agreements, which were offered to producers through December 31, 1947, provided that the Commodity Credit Corporation would purchase whatever quantity of eligible wheat the producer offered to sell within 30 days of the maturity date for loans. The season average price to growers was \$2.29, as compared with the support-price average of \$1.83. With market prices well above the loan rate, producers still placed under loan 31,238,023 bushels, worth \$57,171,135.

For 1947-crop corn there also were loan and price-support programs. Loans were placed on 1,123,186 bushels of corn, worth \$1,466,583.

Price-support programs were initiated in 1947 on oats, barley, and grain sorghum at rates based on the loan rates for corn and relative feeding value of such grain to corn. Both loan and purchase-agreement programs were included. Quantities placed under loan and values were: Oats, 243,592 bushels, worth \$141,420; barley, 337,102 bushels, worth \$321,769; grain sorghums, 42,333 hundredweight, worth \$85,447.

A price-support program for rye and one for rice were announced, but market prices were so favorable that it was not necessary to put the programs in operation.

The 1947 support program also included a purchase-agreement program and a loan program for dry edible beans and a purchase-agreement program for dry edible peas. Owing to favorable prices no deliveries were made to CCC under any of the programs.

Price-support programs were available to producers of Austrian winter peas, hairy vetch, crimson clover, common ryegrass, and blue-lupine seed. Only the latter entered the program, however. Blue-lupine seed placed under loan during the loan period—which extended from May 1947 through the middle of August 1947—totaled 19,396,488 pounds. Only 1,359,814 pounds were redeemed; the remainder was forfeited to the CCC.

Most of the 1948 price-support programs on grain, pulses, feeds, and seeds had been developed before the fiscal year ended. Indications were that participation would be the heaviest in a number of years.

#### Procurement, Sales, and Exports

Approximately \$1,159,000,000 was spent during the year in procurement for United States-occupied zones, the Greek-Turkish aid program, United States foreign relief programs, cash-paying foreign governments, and other claimants. Careful planning and administration were necessary if such a large volume as this was to be purchased with the least possible disruption of normal marketing activities. Although wheat and flour accounted for the major volume of procurement, large quantities of rice, barley, grain sorghums, oats, dry beans and peas, and vegetable and field seed crops were also procured.

The general-supply program, in operation since July 1, 1946, provides a mechanism under which the Department acquires, handles, and disposes of commodities to foreign claimants. There were stock-pile dockets for grains, wheat flour, and dry peas and beans. Other com-



<sup>2</sup> Includes exchange purchases (where wheat of a particular quality, or in a particular area is sold and a like quantity of a more desirable quality for export or in better position for export is purchased) which do not result in an increase in ownership or availability for export. When these exchange purchases are taken out of the total and adjustment is made for outright domestic sales (which are negligible) and operating losses, net purchases for export during the 1947-48 fiscal year become 308,286,253 bushels.



## FOREIGN ASSISTANCE ACT (ECONOMIC COOPERATION ADMINISTRATION)

(Austria, Belgium, France, French Zone, Greece, Italy, Netherlands, Norway, and Trieste)

	<i>Pounds</i>		<i>Bushels</i>
Wheat flour-----	305,281,003	Wheat -----	21,545,861
Durum granular-----	6,997,562		
Field seed-----	3,293,480		
Total -----	315,572,045		

## CASH GOVERNMENTS

	<i>Pounds</i>		<i>Bushels</i>
Flour (Israel)-----	19,100,300	Wheat (20 countries)---	72,534,245
Rice (Netherlands East Indies)-----	1,000,000	Corn (Venezuela and France)-----	1,026,301

Arrangements were made during the year for the PMA commodity offices to make sales and shipments of seeds acquired under price-support operation which were stored locally or stored in transit within the area served by the office. With respect to winter cover-crop seed not used in the area where produced, this plan provides more storage space and permits the seed to be moved nearer to the ultimate destination. The seeds on hand of Sudan grass, alyce clover, blue lupine, and alfalfa, which had been acquired under previous loan programs, were offered for sale. A very small amount of Sudan grass seed was sold. Substantial quantities of the CCC stocks of alyce clover and 1946 blue lupine seed were disposed of, and all of the 1946 alfalfa seed was sold. The stocks of blue lupine seed acquired under the 1947 loan program were offered at \$4.50 per hundredweight (as is, where is), and approximately 5,000,000 pounds of such seed were sold. The offer remained in effect throughout the fiscal year. The 22,000,000 pounds of ryegrass seed acquired under the 1946 price-support program were offered at \$8.10 per hundredweight, f. o. b. shipping points in the Pacific Northwest, but only a few sales were consummated. Later in the fiscal year, 1946-crop ryegrass seed was offered at \$7.75 per hundredweight in five or more carlots.

## Market News

Requests for market information increased as trading in grain, feed, and related commodities became more nearly normal.

The grain market news work continued to be administered from Washington through field offices at Minneapolis, Chicago, Kansas City, San Francisco, Los Angeles, and Portland, Oreg., but the Atlanta office was closed after the inauguration of three Federal-State market news services in the Atlanta area lessened the need for it. Federal-State market news services were extended, and at the end of the year active programs were in operation in Alabama, California, Maryland, North Carolina, Ohio, Oregon, and Virginia.

Besides conducting the general administration of the program, the Washington office issued market reports on rice and feed, prepared material for quarterly summaries and for special reports on the principal grains and feeds, and prepared an annual summary covering



the marketing of southern rice. It compiled statistics on the supply and distribution of rice and on the production, shipment, and stocks of alfalfa meal and of brewers' and distillers' dried grains. It also issued crop quality reports for the principal grains and monthly reports on the inspection and quality of soybeans.

The Minneapolis office supplied current market information to spring wheat and flax growers in the North Central States and to dairymen in Minnesota and Wisconsin. It also prepared a quarterly supply and distribution report on flaxseed and a semiannual report on the supply and distribution of durum wheat. The Chicago office furnished current market information on grain and feed to farmers, feeders, and others in the Corn Belt. The Kansas City office supplied information to growers of winter wheat, grain sorghum, and alfalfa and to feeders in the Central and Southwestern States. Information was disseminated by means of weekly grain and feed market reviews and a weekly hay market review which featured both alfalfa and prairie hay. All three central-western offices issued weekly grain stock reports compiled at the Washington office and forwarded over leased wire to the field offices for distribution.

Grain, hay, and hop growers in the Pacific Northwest were served by the Portland office until it was closed temporarily, when the mailing lists were taken over by the San Francisco office. The San Francisco office issued reports on wheat, barley, and other grains, hops, beans, and rice. The Los Angeles offices prepared daily and weekly reports on the Los Angeles alfalfa market, weekly reviews on feed and beans, and a semiannual summary on production, movement, and utilization of alfalfa hay in southern California. Both the San Francisco and Los Angeles offices supplied comprehensive information on feed supplies and prices to California dairymen and poultrymen.

Except in California, the Federal-State market news projects confined their activities mostly to grain, hay, and feed. Market news was carried to livestock feeders, dairymen, and other agricultural interests through the medium of daily price reports, weekly market reviews, quarterly supply and distribution statistics, and semiannual and annual summaries. More than a million of these releases were mailed direct to producers, feeders, and others.

The various market reports and summaries continued to feature the supply and utilization of the principal grains and feeds, but crop conditions, market movement, stocks, demand, and prices also held an important place. The development of Federal-State market news programs tended to shift market news more to State levels, where distribution was more effective.

Five hundred or more statistical series were maintained for current use in the preparation of market reports and in replying to special requests. These statistics covered production, stocks, market movement, utilization and prices of the principal grains, grain byproduct feeds, oil seed meals, and rice.

### Regulation and Inspection

#### FEDERAL SEED ACT

The complete labeling of seeds moving in interstate commerce is required under the Federal Seed Act, which supplements State seed

legislation. During the year there were 1,049 reports and investigations of complaints charging violations, as compared with 835 during the preceding year. Thirty-four recommendations of criminal action were made, and 13 recommendations of seizure. As the year closed, 11 criminal and 9 seizure cases were pending in court.

When offered for importation, agricultural and vegetable seeds must be tested for quality under the act. Of about 66 million pounds of seeds offered for importation, about 3 million pounds were rejected as offered and about  $2\frac{3}{4}$  million pounds were released after cleaning and staining.

#### GRAIN STANDARDS ACT

PMA supervises the activities of grain inspectors licensed under the United States Grain Standards Act, and passes on appeals from their inspections. Such inspections this year totaled 2,100,479, slightly fewer than in 1947, but the number of appeals increased from 46,640 to 56,687.

Supervision of 7.3 percent of these inspections was based on Federal samples and 1.4 percent was based on a review of inspectors' samples. Grain inspected amounted to 4,050,195,000 bushels, and total inspection certificates issued under the act numbered 2,157,796.

#### PREVENTION OF ADULTERATION OF GRAIN

Under a program to prevent the debasing of high-quality bread grain by the admixture of low-quality and out-of-condition grain, PMA examined 1,384 lots of grain.

#### Research and Testing

Standardization-research projects conducted during the year included: Studies of the official standards of grains covered by the Grain Standards Act, looking to a reduction in the number of grades and a simplification of the grade specification; continued research to devise a simple, objective test for bread baking and the gluten quality of wheat; continued study of a quick, practical photometric test for determining gluten quality; work on four types of electric devices for testing grain moisture; graded and classed hay samples used by various State experiment stations in experimental feeding trials or curing tests; and graded hay samples collected in the comparative forage harvesting and feeding investigations conducted by the Department at Beltsville, Md.

Testing activities included periodic tests of moisture meters and other inspection apparatus used by PMA in its field offices and by licensed inspectors.

(The following research was carried on under authority of the Research and Marketing Act:)

A method was studied whereby soybeans or flaxseed are simultaneously ground and intimately mixed with an oil solvent. The mixture is then filtered, either with or without a period of preliminary refluxing, and the oil content of the filtrate is determined either by evaporating this solvent and weighing the oil or by determining the specific gravity of the solvent-oil mixture. Comparative tests made

with various modifications of this procedure and by official methods indicate the probability that a suitable procedure can be developed for the rapid determination of soybean- and flaxseed-oil content requiring relatively simple laboratory equipment and operations.

Several methods of remodeling grain bins for use with driers were studied in cooperation with the Agricultural Research Administration, and with the Iowa and the Indiana experiment stations. Three types were selected and remodeling has been started on two bins and completed on the third. Tests and demonstrations were conducted with the remodeled bin at Lafayette, Ind., on both ear and shelled corn. The test on drying shelled corn was made where the corn was 10 feet deep in the bin. The moisture was reduced from 24.5 to 11 percent in 221 hours. Heat was applied for 203 hours, 233 gallons of gasoline were used for fuel, and 3,567 kilowatt-hours of electricity for power. The commercial grade of the corn was raised from sample grade to No. 2. Changes in the grain during drying were determined by the District Laboratory of the Grain Branch, Peoria, Ill., and Corn Products Refining Co., at Argo, Ill. The tests indicate that when high-moisture corn is dried before damage has occurred at temperatures not higher than about 130° F. and in a period of not more than about a week, the grain is not damaged for commercial purposes and may be stored safely.

Approximately 12,000 North Carolina farms were selected on a representative-sample basis and visited for the purpose of obtaining data as to the quantity and quality of grain-storage facilities, to estimate loss and damage caused by rodents and insects, and to determine the adaptability of existing structures for controlling rodents and insects. Tabulation and analysis of the data had not been completed at the end of the fiscal year.

Contracts were awarded to the Ingman Laboratories, Minneapolis, Minn.; the Omaha Grain Exchange Laboratories, Omaha, Nebr.; and the Doty Technical Laboratories, Kansas City, Mo., to make milling, baking, chemical, and physical tests of approximately 2,000 samples of wheat. During the year, 1,871 samples of commercial wheat of the classes Hard Red Winter, Hard Red Spring, and White, covering a wide range in quality, were obtained by the field offices of the Grain Branch and submitted to these laboratories. Representative portions of the flours milled from 1,681 of these samples have been received at the Beltsville laboratory for sedimentation tests, and reports of the milling, baking, chemical, and physical tests made by the contracting laboratories have also been received. Statistical analysis of the data has not yet been made but a reasonably good relationship between sedimentation values and bread-baking quality is evident. One of the most significant observations made of the data so far obtained is the obviously rather good interrelationship between sedimentation value, protein content, and gluten quality as indicated by a device used to test the physical properties of bread doughs.

To determine the causes of flavor deterioration and staling of bread and rolls, studies and investigations were begun during the year. The research will be conducted, under a contract, by the American Institute of Baking, Chicago, Ill. Tentative findings show that bread decreased in temperature about 15° to 20° F. from the time it was wrapped until it was loaded into trucks; that bread decreased in tem-



perature during conventional distribution procedures at moderate to low external temperatures; and that bread drops very rapidly in temperature when delivered outside stores or restaurants in wooden boxes or in cardboard cartons. If subsequent experimentation shows that temperature decreases are an important cause of staling, more research will be carried on to improve handling procedures.

Under a project to develop corn-drying equipment, about 50 cribs of ear corn were dried in tests and demonstrations. Several types and sizes of driers and different kinds of fuel were used successfully.

## LIVESTOCK, MEATS, AND WOOL

### Hog Price Support

In accordance with legislative requirements, a price-support program for hogs was available to producers during the year. Although hog prices averaged closer to the support level during the packing-house strike in March through May than at any time since the discontinuance of price ceilings, support operations were not required under this program during the year.

### Procurement

#### MEAT AND LARD

Imports of cattle to the United States from Mexico were barred late in 1946, after the outbreak of foot-and-mouth disease in Mexico. Nearly half a million head of cattle a year had normally been imported from Mexico. To provide an outlet for these cattle, a program was begun to assist Mexican firms in establishing meat-canning plants. By the end of 1948 six canning plants were in operation. The Department purchased 40,535,403 pounds of Mexican canned meats for about \$11,300,440. This purchase provided for an outlet of approximately 180,000 head of Mexican cattle.

During the year purchases were made in the United States for various countries and for other Government agencies to supply 13,537,554 pounds of canned horse meat and 100,581,340 pounds of lard for foreign relief programs.

#### WOOL

The wool-purchase program continued through 1948 although, owing to the lack of legislative authority, no program was in effect for the period April 15 to August 15, 1947.

As in past years, the Commodity Credit Corporation bought the wool from producers through established dealers and cooperative associations that serve as handlers for CCC. The class, shrinkage, and value of each lot were determined by Government appraisers in accordance with a schedule of purchase prices. In December 1947 a policy was established for selling CCC wool on the basis of a core test to determine shrinkage. Much more of the older wools on hand were disposed of than would have been possible without the core tests.

Purchases totaled 150,506,450 pounds, sales 393,377,579 pounds, and stocks on June 30, 1948, 166,653,958 pounds.

## Regulations

### THE PACKERS AND STOCKYARDS ACT

Under the Packers and Stockyards Act, the Secretary of Agriculture supervises the operations of packers, stockyard companies, market agencies, dealers, and licensed poultry handlers, and regulates rates and charges for services. Supervisory offices are maintained at 20 principal livestock markets. From these offices members of the field supervisory force observe daily operations in the stockyards for the purpose of ascertaining (1) any inadequacies in facilities or services, (2) any unfair, deceptive, or discriminatory practices engaged in by any stockyard companies, commission firms, dealers, or packers who buy or sell livestock at the yards, and (3) any conditions detrimental to the interests of livestock producers patronizing the public markets.

Increased emphasis was placed on the supervision of trade practices and improvement of services. As a result of the numerous wage adjustments and increases in other operating costs, market agencies and stockyards made a greater number of requests for increases in yardage and commission rates.

As of June 30, 1948, 207 stockyards were posted under the act, 4,972 market agencies and dealers were registered, 2,123 packers were under supervision, and there were 1,603 poultry licensees.

### THE INSECTICIDE ACT

The Federal Insecticide, Fungicide, and Rodenticide Act of 1947, which superseded the Insecticide Act of 1910, extended the provisions of the latter act to cover weed killers and rodenticides, and provided greater protection to farmers, ranchers, orchardists, and others who use insecticides, fungicides, disinfectants, weed killers, and rodenticides. The new act became effective as to weed killers and rodenticides on December 25, 1947, and as to insecticides, fungicides, and disinfectants on June 25, 1948.

Under the new law each economic poison must be registered before it can be shipped in interstate commerce, imported into or exported from the United States, or distributed in the District of Columbia or the Territories. This new provision necessitated that a much greater than normal proportion of PMA's insecticide work be done on registrations. Labels numbering 20,832 and involving 16,356 products were submitted. Registrations totaled 10,592, and 9,687 letters criticizing labeling were sent to registrants. Altogether 976 official samples of economic poisons were collected, tested, and reported on as a part of the enforcement program.

### Market News

Demand continued heavy for market news information on livestock, meat, and wool supplies and prices. PMA provided current and historical information on production and marketing through daily and other reports on livestock, meats, and wool markets. The service was expanded to include market information on fresh and cured meats sold at wholesale to retail distributors and hotel supply houses in the vicinities of Los Angeles, Calif., and Portland, Oreg.

Market news field offices were operated covering 29 public livestock markets, direct marketing of livestock in two areas, contracting of lambs in one area, five wholesale meat markets, and one wool market.

### Standardization

#### LIVESTOCK AND MEATS

Studies were continued on revision and modification of existing grade standards for cattle, beef and veal, and lamb and mutton, and considerable work was done on objective specifications for grades of butcher hogs. Demonstrations of class and grade standards of live animals and meat were conducted at 20 markets and livestock shows. Grade standards were demonstrated at 14 locations to college students and faculty members.

#### WOOL AND MOHAIR

Studies relating to the development of standards for wool, wool top, and mohair, and their application to production, commerce, and industry, were continued. Practical forms of the official wool and wool-top standards prepared by PMA were sold for commercial use and distributed without charge for official and educational use. More than 19,000 wedge scales for wool fiber measurement have been distributed to the industry at cost. Work was continued on a project under which CCC wool was sorted before being placed on the market. At the end of the year, 6,700,000 pounds had been transferred to the project, 3,700,000 pounds had been sorted, and more than 3,000,000 pounds had been sold.

### Meat Grading

The volume of meat grading was smaller than during the preceding year, mainly because the supply-and-demand situation was such that meat could be merchandised with little or no regard for grade standards. Approximately 3 billion pounds of meat and lard were officially graded and certified, as compared with 5.7 billion pounds during the year preceding. Of the 3 billion pounds graded, 2.8 billion pounds were beef, veal, lamb, and mutton, representing the roller-stamping for grade of about 10 million carcasses.

### Marketing Research

(The following research was carried on under authority of the Research and Marketing Act:)

In one research project, study is being made to improve the correlation between live cattle grading as performed by market news reporters and the carcass grades as determined by official meat graders. The study indicates that there is a tendency for the grades given slaughter steers and heifers to be lower than the official grade of the carcasses. The study shows, on the other hand, that there is a tendency for live animal grades to be high in the case of cows in comparison with the official grades given the carcasses derived therefrom.

Comparison of live animal grades and carcass grades of lambs was the objective of a research project carried on in Nebraska, California, and Texas. It was found that there was a tendency to overgrade



lambs in the border line between the Good and Choice grades and, to some extent, between the Medium and Good grades. Any necessary corrections in live animal grading of the market reporters were made through discussion and demonstration.

A study was made to determine the possibilities of using color photographs in illustrating differences between grades of carcass beef. A total of 174 photographs was taken of beef carcasses from cattle of different ages, sexes, weights, and degrees of fatness.

A contract was made with the American Meat Institute Foundation of Chicago to conduct research into the fundamental characteristics of beef of different grades, weights, and sexes, the object being a relative appraisal of the factors that determine grade.

A project was begun to determine how the preparation and packaging of domestic wool clips can be improved so that domestic wool can better compete with foreign wool and bring increased returns to growers.

Research was directed toward the improvement of marketing services, facilities, and methods of handling livestock at public stockyards. At three stockyards, suggestions were made for the rebuilding of facilities and betterment in service. At another stockyard, suggestions were made for the correction of unsatisfactory water conditions. Suggestions made at a major stockyard where new facilities were under consideration resulted in the construction of new sorting pens and formulation of plans to reconstruct truck loading and unloading facilities.

Progress was made in the development of an improved type of scale that will automatically indicate and print correct weight values that cannot be influenced by the carelessness, negligence, or prejudice of weighers. A pilot model of such a scale was tested and the results indicated that the new equipment is sound basically and adaptable for livestock weighing.

In another project, data on the number and live weight of livestock slaughtered under Federal inspection by States were compiled back to January 1947. Current data are furnished monthly to the Bureau of Agricultural Economics, where they are combined with information on non-federally inspected slaughter, and the figures on total commercial slaughter, by States, are published monthly. Estimates of slaughter and meat production under Federal inspection also are being prepared weekly.

## POULTRY AND EGGS

### Price-Support Purchases

An egg price-support program, started in the spring of 1947, carried through into July 1947. As production declined seasonally, prices strengthened, and price-support operations were terminated. During the early months of 1948, egg prices were at first slightly below the support level (a national average of 90 percent of the parity price) but soon rose a little. In early May, however, price levels in the Midwest had declined to such an extent as to lower the national average percentage of parity below 90 percent. A purchase program was inaugurated in early May, consisting of an offer to buy dried whole eggs from processors provided they paid not less than 35 cents per dozen

at the farm for all eggs purchased during the life of the contract. This program was almost instantly effective in not only halting the decline in prices, but also in raising prices in the great egg-producing areas of the Midwest to the minimum level required.

Purchases of dried eggs in July 1947 and in May and June 1948 totaled 19,386,056 pounds, costing \$24,624,755. Purchases of frozen whole eggs in July 1947 totaled 8,989,270 pounds, costing \$2,941,524.

The need for the price-support program came about because of an excessive production of eggs in the Midwest, where quality is generally the lowest. Low-quality eggs, of course, bring low prices in the market, thus lowering the national average price received by farmers. By the end of the fiscal year 1948 it was apparent that the poultry industry was reducing the production of low-quality eggs. Faced with high feed costs during the spring months of 1948, farmers raised 15 percent fewer young chickens than during the previous year. The reduction was largest—25 percent—in the Midwest.

No purchases of chickens or turkeys for price support were made during the fiscal year 1948.

#### **Disposition of Price-Support Commodities**

All dried whole eggs and frozen whole eggs acquired under the price-support and supply programs for the fiscal year 1947 were disposed of during the fiscal year 1948.

Dried whole eggs were disposed of as follows: To the State Department for use in foreign relief programs, 6,100,000 pounds; to the Department of the Army, 18,825,000 pounds; to commercial exporters, 1,000,000 pounds; sales to the United Kingdom, 5,300,000 pounds; and to direct distribution (Section 32) programs, 5,665,000 pounds.

Frozen whole eggs were disposed of as follows: To the European Cooperation Administration, 37,543,000 pounds; to direct distribution (Section 32) programs, 11,857,000 pounds; to commercial exporters, 9,157,000 pounds; to domestic handlers, 2,773,000 pounds, and sales of eggs not suitable for program use, 11,000 pounds.

New York dressed frozen turkeys, acquired during the fiscal year 1947, were disposed of during the fiscal year 1948. The bulk of these turkeys, 1,428,000 pounds, was sold to the Department of the Army, whereas the balance, 104,000 pounds, was sold to the poultry trade.

#### **Repackaging Operations**

About 23,600,000 pounds of dried-egg powder packaged in barrels, boxes, and drums were repacked in 5-ounce fiber cartons; a little less than 16,700,000 pounds were repacked in 14-pound fiber cartons.

#### **Standardization and Grading**

A final draft of Tentative U. S. Specifications and Weight Classes for Wholesale Grades for Shell Eggs was prepared and approved by the Administrator on September 7, 1947, and became effective February 1, 1948.

Procurement grades for shell eggs were discontinued when the consumer grades became effective December 1, 1947. Provision was made in the consumer grades for supplemental grade specifications for

Government purchase only. The Standards for Quality for Individual Shell Eggs and the Specification and Weight Classes for Consumer Grades for Shell Eggs were made official by publication in the Federal Register.

Proposed revisions were developed for the Tentative Specifications for U. S. Standards for Classes and Grades for Live Poultry. These were last revised in 1944.

A 23-member "Standards and Grades Task Group" and a 40-member "Container Task Group" of the Department's Poultry Industry Advisory Committee were selected from nominations submitted by national associations and organizations.

An egg grading and marketing school was participated in cooperatively with Rutgers University, the New Jersey State Department of Agriculture, and the Northeastern Poultry Producers' Council.

### Research

A cooperative project with the Bureau of Animal Industry sought to determine rates of deterioration in egg quality between various kinds of eggs held at certain temperatures and for specified periods of time. This project will be continued until April 1949.

Transportation tests were conducted to compare the performance of flats and fillers of different size and design and egg cases of different sizes. Eight tests were made in railroad cars and four in trailer trucks. These tests were conducted to obtain information required in developing standard egg-case and packing-material specifications.

One phase of a laboratory testing program, that of comparing fillers and flats of different sizes and dimensions and egg cases of different sizes, was completed. The studies consisted of incline-impact tests (rough-handling tests) and compression tests. These tests were also used in establishing standards of performance for egg cases, fillers, and flats. Packaging Service Corporation, Washington, D. C., and the National Bureau of Standards, United States Department of Commerce, cooperated with PMA in making these tests.

About 7,560 current receipt and nearby producer-graded eggs, both brown and white, were measured and weighed. This completed a study started during the fiscal year 1947 when about 8,085 eggs were measured and weighed. The entire study was undertaken to find what filler cell and egg case dimensions are necessary to properly accommodate the eggs being shipped today; also, to find what proportion of the different weight classes are being shipped in commercial channels. A report, *Egg Measurement Studies*, summarized results of this research.

PMA cooperated with the Bureau of Animal Industry and the Bureau of Human Nutrition and Home Economics in planning and carrying out some of the details of a comprehensive study of the cutting and cooking of large turkeys in halves, quarters, disjointed parts, and cross-cut steaks. The study in its entirety will throw new light on alternate methods of merchandising large turkeys and on home methods of preparing turkey parts. Information also has been collected on current commercial practices in merchandising turkey parts in various sections of the country and on current commercial practices in the temperatures used in the initial freezing and storing of frozen turkeys.



A progress report, entitled "Transportation and Laboratory Tests Comparing Flats and Fillers of Different Design, Two Fillers of Different Dimensions, and Different Combinations of Flats and Fillers," was distributed to interested groups.

(The following research was carried on under authority of the Research and Marketing Act.)

A survey of 172 families in four income groups was made in Idaho Falls, Idaho, in November 1947 to determine the factor affecting consumer demand for turkeys produced in 11 Western States. About 70 percent of the families having dinner at home on Thanksgiving served turkey, 60 percent having dinner at home on Christmas served turkey, and about 25 percent of the families served turkey at other times during the year. When asked why they did not buy turkey more often, about 40 percent of the families gave high prices as their first reason, while 32 percent said that turkeys were too large.

Although turkey had not been sold in halves, quarters, or parts in Idaho Falls, certain questions were asked concerning the probable use of such sections or portions. About half the families had heard of using half turkey and about the same proportion indicated that they would use such a product if available. About a third of the families had heard of using quarter turkey and turkey parts, and a like proportion indicated that they would use such products if available.

#### Transportation Activities

The Railroad Classification Committee proposed for inclusion in its rules and regulations specifications allowing eggs to be packed and shipped by rail only in oversize egg cases and fillers. A PMA representative pointed out to the committee that this would mean a tremendous added expense to shippers and packers, for oversize cases and fillers cost more and result in greater damage to eggs than do standard packing materials. The committee withdrew its proposal.

The Classification Board of the American Trucking Association held a preliminary hearing on a proposal that included the use of impractical specifications for egg cases and packing materials. PMA representatives protested the inclusion of such specifications. The board reconsidered and decided to refer to the Recommended Standards for Shell Egg Containers as promulgated by PMA.

#### Publications

Slides and charts, in color, and illustrating egg quality and egg standards, were prepared for the training of egg graders and for distribution at cost to educational groups for general use in teaching and extension work.

A poster, in color, entitled "Know the Eggs You Buy," illustrating U. S. grade labeling on egg cartons, eggs of different weights, and eggs of different quality—broken out raw, fried, and poached—was prepared for consumers.

A processed circular, Consumer Tips for Buying Eggs, also was prepared for consumers.

A revision of the Recommendations for Standard Egg Case and Inner Packing Material Specifications and Standard Packing Procedures was completed.

A progress report, entitled "Report of a Test Comparing Two Types of Flats Used in Cases Transporting Eggs in Two Trucks from Mentone, Ind., to New York," was distributed to representatives of interested agencies.

A report entitled "Report of a Transportation Test Comparing a New-Type Aluminum Refrigerator Car With a Standard Refrigerator Car; and Egg-Case Flats Having  $\frac{1}{8}$ -Inch Larger Posts Than Are Standard With Flats Having Standard Posts" was distributed to interested agencies.

Farmers' Bulletin No. 1378, Marketing Eggs, was revised and made available for distribution.

### Market News

Market news, both for poultry and eggs and dairy products, is discussed on page 45.

## SUGAR

### Subsidy Operations

#### PURCHASE PROGRAMS

During the first 6 months of the fiscal year, 1947-crop Cuban sugar and Puerto Rican and Virgin Islands sugar continued to move to the United States and to other countries for which it was purchased. These crops had been purchased previously, that from Cuba under the 1946 and 1947 Cuban Sugar Crops Purchase and Sale Contract. The 1947 Cuban crop, the largest in history, and the 1947 Puerto Rican and Virgin Islands sugar cargoes were disposed of as shown in table 8.

TABLE 8.—*Disposition of Cuban, Puerto Rican, and Virgin Islands sugar crops (raw value), 1947*

Sugar for—	Approximate quantities from—		
	Cuba	Puerto Rico	Virgin Islands
	<i>Short tons</i>	<i>Short tons</i>	<i>Short tons</i>
United States.....	3, 853, 393	960, 583	2, 738
Local use.....	227, 953	126, 662	224
Other countries.....	1, 881, 147		
U. S. Department of Army, for occupied areas.....	485, 350		
United States foreign-aid program.....	364		
Total.....	6, 448, 207	1, 087, 245	2, 962

Pursuant to the provisions of the 1946 and 1947 Cuban contract, approximately 125,000 short tons, raw value, of refined sugar were purchased at 6.3488 cents per pound (f. a. s. Cuban ports). This sugar was sold to foreign claimants and to the United States Department of the Army for use in occupied areas at cost plus administrative expenses and handling costs.

By amendment to the 1946 and 1947 Cuban contract in October 1947, an average settlement price of 4.9625 cents per pound (f. a. s. Cuban ports) was agreed upon for the entire 1947-crop Cuban raw-sugar purchase. This amendment also included the purchase of an additional 56,790 short tons, raw value, of refined sugar by the Commodity Credit Corporation, at 6.272 cents per pound. The refined sugar was sold to the Department of the Army for use in occupied areas. Approximately 321,000 short tons 1947-crop Cuban raw sugar, representing the remainder of the purchase by CCC under the 1946 and 1947 Cuban Sugar Crops Purchase and Sale Contract, were shipped during the last half of the fiscal year by the Department of the Army for use in occupied areas.

CCC assigned to the Reconstruction Finance Corporation its rights and obligations with respect to the purchase of blackstrap molasses and industrial alcohol under the 1946-47 Cuban contract. This assignment was amended to extend the termination date from June 30, 1947, to June 30, 1948. As all purchases under this assignment were completed before June 30, 1948, no further extension was necessary.

The average final-settlement price for 1947-crop Puerto Rican and Virgin Islands raw sugar was 5.8 cents per pound.

The Department also purchased 1,000,000 short tons of 1948-crop Cuban raw sugar, 38,811 short tons of 1947-48 crop Peruvian raw sugar, and 16,800 short tons of Javanese direct-consumption sugar for use by the Department of the Army in occupied areas in Japan, Korea, and Germany, and for use under the United States foreign-aid program in Italy and Austria. The prices of such sugar were: Cuban—4 cents per pound f. a. s. Cuban ports, basis 96° polarization; Peruvian—4 cents per pound f. a. s. Peruvian ports, with no allowances for polarization; and Javanese direct-consumption sugar—5.22 cents per pound, delivered in Japan. Through the end of June 1948, approximately 596,540 short tons of the Cuban and Peruvian sugars had been shipped. Shipments of the remainders of these tonnages were to be made during the first half of the 1949 fiscal year.

#### Price Support

Under the 1947 sugar-beet price-support program, processors who guaranteed their growers an average price of \$14.50 per ton of beets of average sucrose content were, in turn, guaranteed reimbursement by CCC to the extent that the average basis price for refined cane sugar for the 1947-crop marketing period was less than \$8.20 per 100 pounds, such reimbursement to apply only for granulated sugar produced from 1947-crop sugar beets. Since 1947-crop beet sugar is sold during the period beginning early in the 1948 fiscal year and ending about the close of the 1949 fiscal year, the costs to CCC cannot be predicted accurately at this time. However, reports indicated that as of June 30, 1948, approximately 82 percent of the production had been sold at a cost to CCC of approximately \$11,861,270.

The price-support program for 1947-crop Hawaiian sugar, which provided for an average San Francisco delivered price equal to the final average price paid for Cuban sugar with adjustments for duty and freight differences, was completed at no cost to CCC.

During the fiscal year payments of approximately \$8,600,000 were completed to Puerto Rican and Virgin Islands producers of 1946-crop



sugar, and \$6,369,000 was paid to Hawaiian producers of 1946-crop sugar so that treatment could be accorded these areas equal to that accorded to Cuba for the 1946-crop Cuban sugar. In addition, Public Law 708, Eightieth Congress, approved June 19, 1948, authorized CCC to make adjustment payments to certain processors of raw cane sugar in Puerto Rico and Hawaii who dismantled or sold their mills after processing the 1946 crop. Pursuant to this law, processors in Puerto Rico and Hawaii who were eligible have received adjustment payments totaling \$294,113.63. Thus, they received equal treatment with other processors in those areas for the crop year 1946.

#### **Refiner Program**

Offshore raw sugar of the 1947-crop brought to the United States was sold to refiners by CCC under contracts with refiners of raw cane sugar east of the Rocky Mountains. This program has been operative since 1943. Although the last of this sugar was entered before the end of 1947, it was not until the middle of March 1948 that the last of the CCC sugar was melted. Raw sugar sold to refiners and melted after October 31, 1947, and before January 12, 1948, was sold at the price (6.32 cents per pound) in effect before October 31, 1947. Raw sugar melted on and after January 12, 1948, was sold at market prices ranging from 5.70 to 5.45 cents per pound, determined in accordance with the contract between the refiners and CCC. The operation of the refiner contract resulted in no loss to CCC. Settlements under this program and liquidation are now being effected.

#### **Completed Programs**

The program for importation of direct-consumption sugar was terminated on October 31, 1947, with the termination of sugar price ceilings. This program, in operation during the years when sugar was in short supply, helped to assure the United States of an adequate supply of direct-consumption sugar and later enabled the importation and distribution of such sugar within price ceilings. Cost of this program for the 1947 crop was approximately \$125,565.

The authority to exercise such controls reverted to the Office of International Trade, Department of Commerce, on October 31, 1947, with the expiration of the authority under which the Department of Agriculture exercised controls over the exportation of sugar and related products.

#### **Sugar Act Activities**

##### **QUOTAS AND ALLOTMENTS**

The Sugar Act of 1948 was approved August 8, 1947, and became effective January 1, 1948. The suspension of title II of the Sugar Act of 1937 was lifted by Presidential proclamation on November 28, 1947. The lifting of the suspension permitted the resumption of marketing control of sugar under the quota system, after nearly 5 years of sugar shortage.

After a public hearing held in December 1947, the estimate of requirements for continental sugar consumption for 1948 was fixed in early January at 7,800,000 short tons of sugar, raw value. Sugar

quotas were established for the calendar year 1948 on January 7, 1948. The estimate of continental sugar-consumption requirements was reduced on February 26 to 7,500,000 short tons and on May 26 to 7,000,000 short tons, when official statistics available to the Department indicated that the previous estimates were excessive. At the end of the fiscal year, after a marked increase in sugar distribution, plans were being made to increase the estimate to 7,200,000 tons. Quotas and prorations of quota were established and revised in keeping with the determinations of continental sugar-consumption requirements, and to allocate to other sugar-producing areas the deficits in the sugar quotas for Hawaii, the mainland cane area, and the Republic of the Philippines.

The average wholesale price for refined cane sugar at New York for the month of January was 8.209 cents per pound. The average for the month of June was 7.52 cents per pound, and the average for the first 6 months of 1948 was 7.777 cents per pound.

After a public hearing held in December 1947, an order was issued allotting to Puerto Rican refiners the 126,033 short tons of sugar, raw value, which is the portion of the Puerto Rican sugar quota that may enter continental United States during any calendar year as direct-consumption sugar. During the calendar year 1948, it is not expected that it will be necessary to allot the sugar quotas among domestic processors of sugarcane and sugar beets (Hawaii, Puerto Rico, mainland sugarcane area, and sugar-beet area) for marketing in continental United States.

In cooperation with the Bureau of Customs of the United States Treasury, complete control has been maintained of all quota sugar from offshore areas, both domestic and foreign. Raw sugar from offshore areas entered into continental United States for the express purpose of being refined and reexported as sugar or in sugar-containing products has been controlled through the medium of compliance bonds executed by the original importer.

Unless an emergency develops that requires the suspension of title II of the act, quota controls will be in effect until the expiration of the act on December 31, 1952.

#### WAGE AND PRICE DETERMINATIONS

Determinations of fair and reasonable prices were issued during the fiscal year for all domestic sugarcane-producing areas. No significant changes were made in the terms and conditions of determinations which prevailed in the previous fiscal year except for Puerto Rico. In Puerto Rico a sliding settlement scale tied to the yield of sugar from sugarcane replaced the "flat" sharing scale of previous determinations when the price of raw sugar (duty-paid basis, delivered) averages more than \$5 per 100 pounds for the applicable settlement period. The scale provides sharing ratios of 63.5 percent for producers and 36.5 percent for producer-processors for sugarcane yielding from 9 to 9.99 pounds of sugar per 100 pounds of sugarcane. The producers' percentage of sharing increases 1 percent for each pound of sugar recovered above 9.99 pounds up to a maximum of 67.5 percent for sugarcane yielding 13 pounds or more. When the price of sugar averages \$5 per 100 pounds or less, the sharing ratios as between producers and producer-processors remain unchanged at 65 percent and 35 percent,

respectively, for sugarcane yielding 12 pounds or more, and at 63 percent and 37 percent, respectively, for sugarcane yielding from 9 to 12 pounds of sugar. The price determination for the 1948 crop of sugar beets has not been issued.

Determinations establishing fair and reasonable wage rates were issued for all domestic sugarcane- and sugar-beet-producing areas. For workers in Florida and Louisiana the wage rates were increased by about 12 percent over the rates prevailing during the previous year. In Puerto Rico and the Virgin Islands some revisions were made in the wage escalator scale. These did not, however, result in any significant increases in wages. In Hawaii approval was given to the collective-bargaining agreement entered into between a committee representing the International Longshoremen's and Warehousemen's Union sugar locals and units and a committee representing the sugarcane-producing companies. This agreement provided for a minimum wage rate of 78½ cents per hour. The approval of the rates established under the collective-bargaining agreement was given, in view of the fact that the wage rates agreed upon before the issuance of the determination were not less than those indicated by the customary standards employed under the Sugar Act and that the payment of such higher rates, where agreed upon, was necessary to meet the "in full" requirements of the Sugar Act.

In the sugar-beet area two wage determinations were issued, one for work performed in California and the other for work performed in States other than California. The rates prescribed in California were the same as those which prevailed in the previous years. In States other than California, the number of wage districts was reduced from 10 to 6 and the wage scale was completely revised to give effect to the important strides made in mechanizing sugar-beet field work. Additional piece rates were established for workers performing hand tasks in conjunction with machine cultivation, modified sliding scales of payment for harvest work based upon 2-ton yield brackets were provided, and two supplemental wage payments were prescribed. The supplemental wage payments were payable (1) if the worker who entered into an agreement to perform the entire summer and harvest work completed such work and (2) if the worker who entered into an agreement to perform the entire harvesting work completed such work.

During the period of relatively low prices before the war, determinations of fair and reasonable wages and prices were highly significant, in that they provided for an equitable sharing of proceeds from sugar among processors, producers, and laborers. Although the effects of these determinations were less significant during the war years because of the dislocations brought about by incentive programs, price controls, and labor shortages, they have again assumed highly significant proportions with the removal of wartime controls and the passage of the Sugar Act of 1948. These events, combined with the important strides made in production and processing methods in recent years, required the adoption of a more comprehensive program than had previously been necessary properly to administer the wage and price provisions of the Sugar Act of 1948. This program includes a thorough review of all the economic factors affecting the production, processing, and marketing of sugar beets and sugar cane. Plans have



been made to conduct extensive surveys of the cost of and returns from producing and processing sugar beets and sugarcane, man-hour requirements, and the effects of mechanization upon such factors.

As a part of this program a study of the costs, returns, and related factors of the beet-sugar industry was initiated in February. This study covers the operations of representative groups of all sugar-beet producers for the 1947 crop and the operation of all sugar-beet processors for the 1945, 1946, and 1947 crops. Another study of major importance initiated during the fiscal year was a survey of labor performance in the thinning and harvesting of sugar beets.

#### CONDITIONAL PAYMENTS

The conditional-payments provisions of title III of the Sugar Act of 1937, as amended, were applicable to the 1947 crops of sugarcane and sugar beets. The payments to producers were conditioned on the meeting of certain standards with respect to child labor and wage rates, the performance of certain soil-conserving practices, and, in the case of producer-processors, on the payment of fair and reasonable prices for sugar beets and sugarcane as determined by the Secretary. The conditional-payment provisions of the Sugar Act of 1937, as amended, were continued in the Sugar Act of 1948 with only one major change—the requirement of the soil-conserving practices as a condition for payment was omitted.

The base rate of payment under the act is 80 cents per 100 pounds of commercially recoverable sugar, raw value. This rate is scaled down on the basis of the quantity of sugar produced from the farm and it declines to a minimum of 30 cents per 100 pounds of sugar on that part of the total production in excess of 30,000 short tons of sugar.

In addition to the payment for sugar produced, the act also provides for partial crop-loss payments. In cases of bona fide abandonment of planted acreage and crop deficiencies of harvested acreage, these payments give some protection against crop losses resulting from drought, flood, storm, freeze, disease, or insects.

As the war emergency programs have decreased, more attention has been given to the administration of the programs under the Sugar Act. The relationships with the field organizations have been strengthened, and procedures and instructions are being reviewed and revised to meet current operating problems. In this connection, representatives of the Washington office are making more personal contacts with State and county committees.

The estimated total payments to be made, the part of those payments with respect to acreage abandonment and crop deficiency, and the number of payees for the 1946 and 1947 crop years, by various domestic areas, are shown in table 9.

Payments to growers in the sugar-beet area and to sugarcane growers in Hawaii for the 1947 crops were considerably in excess of the payments for the 1946 crops. A larger crop of sugar beets in 1947 was primarily the result of a favorable price and of a record yield per acre. In Hawaii there was a partial return to prewar production. The crop in the continental cane area was reduced by drought and a hurricane.

TABLE 9.—*Payments under the Sugar Act of 1937 and number of payees, in different sugar-producing areas, crop years 1946 and 1947*<sup>1</sup>

Payments and payees	Continental sugar beet area	Continental sugarcane area	Hawaii	Puerto Rico	Virgin Islands
Total payments:	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
1946-----	28, 200, 000	6, 700, 000	6, 575, 000	15, 200, 000	67, 000
1947-----	32, 800, 000	6, 325, 000	8, 110, 000	15, 100, 000	43, 600
Abandonment and deficiency payments:					
1946-----	1, 258, 000	347, 000	-----	592, 000	-----
1947-----	1, 450, 000	400, 000	-----	800, 000	-----
Payees:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
1946-----	62, 000	10, 500	1, 500	14, 400	550
1947-----	65, 000	10, 500	1, 400	13, 500	525

<sup>1</sup> Estimated.

The determinations issued by the Secretary in connection with the payment provisions of the act are reviewed frequently to determine whether changed conditions in the cultivation, harvesting, or processing of sugarcane and sugar beets require revision of such determinations to meet the objectives of the act. Several determinations have been recently revised to meet current conditions, and studies are in progress which indicate that revision of other determinations will be required.

A separate determination for establishing normal yields for sugarcane farms in Florida was issued on December 8, 1947. The base period of 1942, 1943, and 1944 was changed to the more current period of 1944, 1945, and 1946. Previously the same base period was used for establishing normal yields in both Louisiana and Florida. The determination of normal yields for sugarcane farms in the Virgin Islands was also revised on February 3, 1948, changing the base period of 1935, 1936, and 1939 to 1945, 1946, and 1947. This latter period is more representative of current yields of commercially recoverable sugar per acre.

The normal yield determination for sugarcane farms in Puerto Rico was revised on March 17, 1948. This also was necessary to reflect more current yields of commercially recoverable sugar per acre in that area. The former base period of 1938-39, 1939-40, and 1940-41 was changed to 1941-42, 1944-45, and 1946-47. Some of the recent crop years were excluded because those crops were adversely affected by drought.

(The following research was carried on under authority of the Research and Marketing Act:)

Analysis of data gathered relative to the competitive relationship between corn sugar and sirup and cane and beet sugars and sirups indicates that in the production of most products the use of corn

sweeteners in relation to sugar usage has decreased since the end of sugar rationing. In many types of products, however, users are finding it advantageous both from a quality standpoint and price-wise to use either or both corn sugar or corn sirup as a part of their total sweetening agent.

## TOBACCO

### Loans, Price Support, and Exports

Loan and minor procurement activities were continued during the year and two export-subsidy programs and one indemnity-export operation were initiated.

Under statutory authorization, the loan program was conducted at 90 percent of parity as of the beginning of the marketing year for flue-cured, burley, and cigar filler and binder tobacco. Loans for fire-cured tobacco were made at 75 percent of the burley loan rate, whereas loans for dark air-cured tobacco were made at  $66\frac{2}{3}$  percent of the burley rate. Fourteen grower cooperative associations, operating on advanced CCC funds, made the loans to growers and paid the costs of necessary redrying, packing, marketing, and other services.

For tobacco normally sold at auction, loans were made only after the tobacco had been offered for sale and only, in practice, if the amount offered by the buyer was not more than the loan rate established for that particular grade. Approximately 90 percent of the total production was sold on auction markets. Of the 1947 crop 17.5 percent was placed under loan, as compared with 13 percent of the 1946 crop.

Of the 612 million pounds placed under loan during the two marketing years 1946 and 1947, approximately two-thirds had been sold or committed for sale as of June 30, 1948.

The one purchase program operated by PMA served to reduce the amount of tobacco placed under loan, encourage exports, and stabilize marketing and export of tobacco without increasing the risk of CCC in carrying out the provisions of the mandatory loan program. To this end CCC entered into agreements with domestic companies receiving orders from the French Tobacco Monopoly for 1947 crop burley, dark air-cured, and fire-cured tobacco. Under the program, 6,981,451 pounds of dark types of tobacco were acquired by CCC. Such tobacco is under option for the French Tobacco Monopoly.

Initiated during the fiscal year were two export-subsidy programs involving expenditures estimated at approximately \$9,214,000 of section 32 funds. The German export program consisted of an agreement between the PMA Administrator and the Joint Export-Import Agency, Frankfurt, Germany, whereby the Department of Agriculture agreed to pay benefits to companies selling tobacco to the Agency, of not more than one-third of the f. o. b. vessel value of the tobacco and involving not more than \$6,000,000 of section 32 funds. Under this arrangement, contracts covering approximately 58,000,000 pounds of United States and Puerto Rican types of tobacco, to be exported by December 31, 1948, were consummated; they involved approximately \$5,985,000 of section 32 funds. Approximately 50 percent of this tobacco was purchased from the stocks of the 14 grower cooperative loan associations.



The dark tobacco export program, formulated to encourage export of surplus stocks of the 1946 crop of fire-cured and dark air-cured tobacco, extended to exporters' benefit payments amounting to one-third of the fair and reasonable f. o. b. vessel sales price of the tobacco, and provided that the remaining two-thirds of the price of the tobacco was to be paid for by the foreign buyers. Approximately \$3,229,000 of section 32 funds was committed for the estimated 28,400,000 pounds of tobacco expected to be moved under the program.

Under an indemnity program, financed from section 32 funds, PMA committed \$400,000 to share the credit risk assumed by the United States companies selling tobacco to the Austrian Tobacco Monopoly. Approximately 6,500,000 pounds of tobacco were purchased, obligating \$336,111.41, of which \$280,000 remained obligated as of June 30, 1948.

#### Marketing Quotas

Marketing quotas were in effect for flue-cured, burley, fire-cured, and dark air-cured tobacco for the 1947 crop, all quotas having been approved by more than 90 percent of the growers voting in a referendum. Local committees elected by farmers established individual farm-acreage allotments for the 550,000 farms producing these kinds of tobacco.

In a referendum held October 25, 1946, burley growers approved quotas for crops produced in 1947, 1948, and 1949. Allotments for 1948 totaled 463,637 acres as compared with 468,590 acres for 1947.

Flue-cured tobacco growers, in a referendum held July 12, 1946, approved marketing quotas for the crops of 1947, 1948, and 1949. For 1948 allotments totaled 907,636 acres as compared with 1,247,201 acres in 1947.

Fire-cured tobacco marketing quotas were in effect for the 1946 crop, having been approved by growers for 1946, 1947, and 1948 in a referendum held in 1945. Allotments for 1948 totaled 77,347 acres as compared with 118,494 acres for 1947.

Quotas were in effect for dark air-cured tobacco, having been approved for 1946, 1947, and 1948 in a referendum held in 1945. The total acreage allotted to all dark air-cured tobacco farms in 1948 was 33,424 acres as compared with 44,597 acres in 1947.

#### Economic Analysis and Statistical Work

Many responsibilities were handled in connection with foreign-aid programs. Much basic data were developed for price-support programs, marketing quotas, and production goals.

As required by law, quarterly information on stocks of each type and kind of tobacco held by dealers and manufacturers of the United States (and Puerto Rico) was collected and consolidated into a report. An annual report on tobacco statistics was issued in November 1947.

In marketing research under the Research and Marketing Act of 1946, information has been and is being assembled on several problems in the marketing of tobacco. This information is being analyzed to determine where more efficient methods, facilities, or services might be developed, what improvements should be made, and how the improvements should be carried out.

**Inspection, Market News, Demonstrations, and Training**

Inspection service was maintained on all the 153 established auction markets during the fiscal year. Inspected tobacco, totaling more than 2,069,562,000 pounds, represented approximately 99 percent of the total sold at auction. An additional 143,586,000 pounds of tobacco in hogsheds was inspected for cooperative marketing associations in the flue-cured, burley, fire-cured, and dark air-cured areas, and 20,750 bales or bundles representing 829,728 pounds of Wisconsin cigar leaf.

The demonstration and training work included 1,217 farm demonstrations held at rural points in 11 States, 301 farmers' meetings, 1,679 school demonstrations carried on in cooperation with rural vocational education, and visits to 1,072 farms for instructional purposes. Short courses, training courses for inspectors and prospective inspectors, and grading tests were conducted to increase the efficiency of the system.

The market news service, operating as a companion activity to tobacco inspection, furnished growers, the trade, and others with current average prices according to United States grades and additional pertinent market information by separate types of tobacco. A total distribution of 1,263,000 copies of the market news reports was made to the press, radio, growers, the tobacco trade, and others. Around 85 percent of the reports were furnished directly to growers for use at the time their tobacco was offered for sale.

Daily and weekly reports were furnished from the two permanent offices at Raleigh, N. C., and Louisville, Ky., and 11 temporary offices, set up at points in the various belts as the season progressed from area to area. The service for 14 types of tobacco was provided on 873 auction sales floors located on 153 markets in 13 States. A new cooperative market news agreement was entered into with the Maryland State Department of Markets; the previous agreements with North Carolina, Virginia, Tennessee, and West Virginia were continued.

Four market reviews, covering the following classes of tobacco, were prepared and issued from the Washington office of the Branch: Flue-cured types, class 1; fire-cured types, class 2; light air-cured types, class 3 (a); and dark air-cured types, class 3 (b). The reviews are a comprehensive compilation of market, price, and related tobacco information.

**Standardization and Research**

During the year, tentative standards were prepared for southern Maryland tobacco, Type 32. This was done before five Maryland markets were designated for free and mandatory inspection. (After these tentative standards have been given a trial in actual operation, such revisions as are necessary will be made and the standards will be prepared for promulgation as the official standards for grade for Type 32 tobacco.)

Tentative standards for grade were also prepared during the year for Havana Seed tobacco produced in Wisconsin and Minnesota covering Types 54 and 55. These standards covered 21 grades which were used during the season in the work of supporting the market at 90 percent of parity. The official standards for flue-cured tobacco were revised to include 6 additional grades. Also, the official classification of tobacco was amended to recognize a new type of low-nicotine con-



tent tobacco which was designated as Type 31-V. Preliminary studies looking toward the preparation of standards were made of Havana Seed Tobacco of Pennsylvania and New York, Type 53, and for Seed-leaf Tobacco of Pennsylvania, Type 41. (The Department has been requested to establish standards for these two types to serve as a basis for making loans to the growers on their 1948 crop of tobacco.)

Two new lines of research work were begun under the Research and Marketing Act of 1946. These activities cover both physical and chemical research. Physical research is conducted with a view to finding means for measuring the various elements of quality in tobacco. Chemical research is intended to relate the chemical composition of tobacco to the various elements of quality upon which the standards are built. As a preliminary to this work, a survey was conducted covering all available chemical literature relating to tobacco. During the year, an extensive study was made of the burning quality of tobacco and a system was established for scoring the "burn" in actual application in connection with the use of standards.

## NAVAL STORES

### Price Support

The 1947 naval stores loan program, announced May 27, 1947, set loan rates for turpentine at 60.8 cents per gallon and rosin, basis K grade, at \$6.33 per hundred pounds. Established on the basis of 90 percent of parity of the gum naval stores unit (50 gallons turpentine and 1,400 pounds of rosin), these loans were available to producers through December 31, 1947, and the redemption period, originally scheduled to close April 1, 1948, was extended to June 1, 1948, to encourage maximum redemptions.

Turpentine loans were made on 2,743,349 gallons, or about 18 percent of the total 1947 production of gum turpentine. Of this supply 1,899,857 gallons remained in stock as of June 30, 1948. Rosin loans were made on 1,446,283 pounds—and all the loans were repaid.

The 1948 gum naval stores program, announced March 5, 1948, again set support at 90 percent of parity of the gum naval stores unit which, at a higher index, initially set rates at 64.5 cents per gallon for turpentine and \$7.09 per hundred pounds for rosin, basis K grade. On June 8, 1948, these values were adjusted to 40 cents for turpentine and \$7.97 for rosin.

### Naval Stores Act

During the fiscal year considerable regulatory work was carried out on turpentine whereby sampling of an investigational nature disclosed 15 cases of nonconformity with some provisions or requirements of the Naval Stores Act. Included were improper labeling, unacceptable methods of invoicing, and the use of the word "turpentine" for non-turpentine paint thinner. Correction of the objectionable practices was achieved without legal action.

Central distillation has simplified grading and certification by Government inspectors. Day-to-day sampling and inspection have been achieved in the plants by licensing qualified candidates among the employees. Authorized inspection is essential to qualification for a CCC loan.



### Research and Standardization

A scientific paper covering the results of the residual volatile oils remaining in resin was prepared and offered for publication. Related work has been completed on methods of testing dipentine, pine oil, pine tars, acidity in turpentine, nonvolatile residue in turpentine after distillation, and acid number of dark rosin and unsaponified matter in rosin.

A study of acidity caused by excess rosin acids in gum turpentine is being made from which it is believed a limitation on the degree of acidity in gum turpentine can be established and perhaps incorporated in future loan requirements.

A marketing research project, partially financed under the Research and Marketing Act of 1946, was begun in order to appraise the propriety of charges made against producers for processing crude gum in connection with the loan program.

## Description and Sample Location

A standard paper cover for the purpose of this investigation. It is made in a standard size and shape and is made of a standard material. It has been found that the standard size and shape is the most convenient for the purpose of this investigation. The standard material is the most convenient for the purpose of this investigation. The standard size and shape is the most convenient for the purpose of this investigation. The standard material is the most convenient for the purpose of this investigation.

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